SEQUENCE LISTING

<110> Alpine Immune Sciences, Inc.
SWANSON, Ryan

<120> MULTI-DOMAIN IMMUNOMODULATORY PROTEINS AND METHODS OF USE THEREOF

<130> 761612000740

<140> Not Yet Assigned
<141> Concurrently Herewith

<150> 62/613,378
<151> 2018-01-03

<150> 62/733,622
<151> 2018-09-19

<160> 3688

<170> PatentIn version 3.5

<210> 1
<211> 288
<212> PRT
<213> Homo sapiens

<220>
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<223> CD80(B7-1)

<400> 1

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
35 40 45

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
50 55 60

```
Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
65                  70                  75                  80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
                85                  90                  95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
            100                 105                 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
        115                 120                 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
    130                 135                 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
145                 150                 155                 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
                165                 170                 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
            180                 185                 190

Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
        195                 200                 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
    210                 215                 220

Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro
225                 230                 235                 240

Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
                245                 250                 255
```

```
Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
            260                 265                 270


Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
        275                 280                 285


<210>  2
<211>  329
<212>  PRT
<213>  Homo sapiens


<220>
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<223>  CD86(B7-2)

<400>  2

Met Asp Pro Gln Cys Thr Met Gly Leu Ser Asn Ile Leu Phe Val Met
1               5                   10                  15


Ala Phe Leu Leu Ser Gly Ala Ala Pro Leu Lys Ile Gln Ala Tyr Phe
            20                  25                  30


Asn Glu Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln
        35                  40                  45


Ser Leu Ser Glu Leu Val Val Phe Trp Gln Asp Gln Glu Asn Leu Val
    50                  55                  60


Leu Asn Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser
65                  70                  75                  80


Lys Tyr Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg
                85                  90                  95


Leu His Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile
            100                 105                 110
```

```
His His Lys Lys Pro Thr Gly Met Ile Arg Ile His Gln Met Asn Ser
        115                 120                 125

Glu Leu Ser Val Leu Ala Asn Phe Ser Gln Pro Glu Ile Val Pro Ile
    130                 135                 140

Ser Asn Ile Thr Glu Asn Val Tyr Ile Asn Leu Thr Cys Ser Ser Ile
145                 150                 155                 160

His Gly Tyr Pro Glu Pro Lys Lys Met Ser Val Leu Leu Arg Thr Lys
                165                 170                 175

Asn Ser Thr Ile Glu Tyr Asp Gly Val Met Gln Lys Ser Gln Asp Asn
            180                 185                 190

Val Thr Glu Leu Tyr Asp Val Ser Ile Ser Leu Ser Val Ser Phe Pro
        195                 200                 205

Asp Val Thr Ser Asn Met Thr Ile Phe Cys Ile Leu Glu Thr Asp Lys
    210                 215                 220

Thr Arg Leu Leu Ser Ser Pro Phe Ser Ile Glu Leu Glu Asp Pro Gln
225                 230                 235                 240

Pro Pro Pro Asp His Ile Pro Trp Ile Thr Ala Val Leu Pro Thr Val
                245                 250                 255

Ile Ile Cys Val Met Val Phe Cys Leu Ile Leu Trp Lys Trp Lys Lys
            260                 265                 270

Lys Lys Arg Pro Arg Asn Ser Tyr Lys Cys Gly Thr Asn Thr Met Glu
        275                 280                 285

Arg Glu Glu Ser Glu Gln Thr Lys Lys Arg Glu Lys Ile His Ile Pro
    290                 295                 300
```

```
Glu Arg Ser Asp Glu Ala Gln Arg Val Phe Lys Ser Ser Lys Thr Ser
305                 310                 315                 320


Ser Cys Asp Lys Ser Asp Thr Cys Phe
                325


<210>  3
<211>  290
<212>  PRT
<213>  Homo sapiens


<220>
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<223>  CD274 (PD-L1, B7-H1)

<400>  3

Met Arg Ile Phe Ala Val Phe Ile Phe Met Thr Tyr Trp His Leu Leu
1               5                   10                  15


Asn Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr
            20                  25                  30


Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu
        35                  40                  45


Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile
    50                  55                  60


Ile Gln Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser
65                  70                  75                  80


Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
                85                  90                  95


Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
            100                 105                 110
```

```
Arg Cys Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val
        115                 120                 125

Lys Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val
    130                 135                 140

Asp Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr
145                 150                 155                 160

Pro Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser
                165                 170                 175

Gly Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn
            180                 185                 190

Val Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr
        195                 200                 205

Cys Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu
    210                 215                 220

Val Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr His
225                 230                 235                 240

Leu Val Ile Leu Gly Ala Ile Leu Leu Cys Leu Gly Val Ala Leu Thr
                245                 250                 255

Phe Ile Phe Arg Leu Arg Lys Gly Arg Met Met Asp Val Lys Lys Cys
            260                 265                 270

Gly Ile Gln Asp Thr Asn Ser Lys Lys Gln Ser Asp Thr His Leu Glu
        275                 280                 285

Glu Thr
    290
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<210> 4
<211> 273
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> PDCD1LG2(PD-L2, CD273)

<400> 4

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Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln
1               5                   10                  15


Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
            20                  25                  30


Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
        35                  40                  45


His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
    50                  55                  60


Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
65                  70                  75                  80


Pro Leu Gly Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp
                85                  90                  95


Glu Gly Gln Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr
            100                 105                 110


Lys Tyr Leu Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr
        115                 120                 125


His Ile Leu Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln
    130                 135                 140
```

```
Ala Thr Gly Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val
145                 150                 155                 160


Pro Ala Asn Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val
                165                 170                 175


Thr Ser Val Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys
            180                 185                 190


Val Phe Trp Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp
        195                 200                 205


Leu Gln Ser Gln Met Glu Pro Arg Thr His Pro Thr Trp Leu Leu His
    210                 215                 220


Ile Phe Ile Pro Phe Cys Ile Ile Ala Phe Ile Phe Ile Ala Thr Val
225                 230                 235                 240


Ile Ala Leu Arg Lys Gln Leu Cys Gln Lys Leu Tyr Ser Ser Lys Asp
                245                 250                 255


Thr Thr Lys Arg Pro Val Thr Thr Thr Lys Arg Glu Val Asn Ser Ala
            260                 265                 270


Ile
```

<210> 5
<211> 302
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> ICOSLG(B7RP1, CD275, ICOSL, B7-H2)

<400> 5

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Met Arg Leu Gly Ser Pro Gly Leu Leu Phe Leu Leu Phe Ser Ser Leu
1               5                  10                  15

Arg Ala Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
            20                  25                  30

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
        35                  40                  45

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
    50                  55                  60

Tyr His Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr
65                  70                  75                  80

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
                85                  90                  95

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
            100                 105                 110

Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val
        115                 120                 125

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser
    130                 135                 140

Ala Pro His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser
145                 150                 155                 160

Ile Asn Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp
                165                 170                 175

Asn Ser Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn
            180                 185                 190
```

```
Met Arg Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr
        195                 200                 205


Pro Ser Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln
    210                 215                 220


Asn Leu Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp
225                 230                 235                 240


Lys Ile Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
                245                 250                 255


Trp Ser Ile Leu Ala Val Leu Cys Leu Leu Val Val Val Ala Val Ala
            260                 265                 270


Ile Gly Trp Val Cys Arg Asp Arg Cys Leu Gln His Ser Tyr Ala Gly
        275                 280                 285


Ala Trp Ala Val Ser Pro Glu Thr Glu Leu Thr Gly His Val
    290                 295                 300


<210>  6
<211>  534
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD276(B7-H3)

<400>  6

Met Leu Arg Arg Arg Gly Ser Pro Gly Met Gly Val His Val Gly Ala
1               5                   10                  15


Ala Leu Gly Ala Leu Trp Phe Cys Leu Thr Gly Ala Leu Glu Val Gln
            20                  25                  30
```

```
Val Pro Glu Asp Pro Val Val Ala Leu Val Gly Thr Asp Ala Thr Leu
        35                  40                  45

Cys Cys Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn
    50                  55                  60

Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Ala
65                  70                  75                  80

Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe
                85                  90                  95

Pro Asp Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val
            100                 105                 110

Arg Val Ala Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp
        115                 120                 125

Phe Gly Ser Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys
    130                 135                 140

Pro Ser Met Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr
145                 150                 155                 160

Val Thr Ile Thr Cys Ser Ser Tyr Gln Gly Tyr Pro Glu Ala Glu Val
                165                 170                 175

Phe Trp Gln Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr
            180                 185                 190

Ser Gln Met Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Ile Leu
        195                 200                 205

Arg Val Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn
    210                 215                 220
```

```
Pro Val Leu Gln Gln Asp Ala His Ser Ser Val Thr Ile Thr Pro Gln
225                 230                 235                 240

Arg Ser Pro Thr Gly Ala Val Glu Val Gln Val Pro Glu Asp Pro Val
                245                 250                 255

Val Ala Leu Val Gly Thr Asp Ala Thr Leu Arg Cys Ser Phe Ser Pro
            260                 265                 270

Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn Leu Ile Trp Gln Leu Thr
        275                 280                 285

Asp Thr Lys Gln Leu Val His Ser Phe Thr Glu Gly Arg Asp Gln Gly
    290                 295                 300

Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe Pro Asp Leu Leu Ala Gln
305                 310                 315                 320

Gly Asn Ala Ser Leu Arg Leu Gln Arg Val Arg Val Ala Asp Glu Gly
                325                 330                 335

Ser Phe Thr Cys Phe Val Ser Ile Arg Asp Phe Gly Ser Ala Ala Val
            340                 345                 350

Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys Pro Ser Met Thr Leu Glu
        355                 360                 365

Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr Val Thr Ile Thr Cys Ser
    370                 375                 380

Ser Tyr Arg Gly Tyr Pro Glu Ala Glu Val Phe Trp Gln Asp Gly Gln
385                 390                 395                 400

Gly Val Pro Leu Thr Gly Asn Val Thr Thr Ser Gln Met Ala Asn Glu
                405                 410                 415
```

```
Gln Gly Leu Phe Asp Val His Ser Val Leu Arg Val Val Leu Gly Ala
            420                 425                 430


Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn Pro Val Leu Gln Gln Asp
        435                 440                 445


Ala His Gly Ser Val Thr Ile Thr Gly Gln Pro Met Thr Phe Pro Pro
    450                 455                 460


Glu Ala Leu Trp Val Thr Val Gly Leu Ser Val Cys Leu Ile Ala Leu
465                 470                 475                 480


Leu Val Ala Leu Ala Phe Val Cys Trp Arg Lys Ile Lys Gln Ser Cys
                485                 490                 495


Glu Glu Glu Asn Ala Gly Ala Glu Asp Gln Asp Gly Glu Gly Glu Gly
            500                 505                 510


Ser Lys Thr Ala Leu Gln Pro Leu Lys His Ser Asp Ser Lys Glu Asp
        515                 520                 525


Asp Gly Gln Glu Ile Ala
    530


<210>  7
<211>  282
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  VTCN1(B7-H4)

<400>  7

Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile
1               5                   10                  15
```

```
Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly Ile Ser
            20                  25                  30

Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala Gly Asn Ile
        35                  40                  45

Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro Asp Ile Lys Leu
    50                  55                  60

Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly Val Leu Gly Leu Val
65                  70                  75                  80

His Glu Phe Lys Glu Gly Lys Asp Glu Leu Ser Glu Gln Asp Glu Met
                85                  90                  95

Phe Arg Gly Arg Thr Ala Val Phe Ala Asp Gln Val Ile Val Gly Asn
            100                 105                 110

Ala Ser Leu Arg Leu Lys Asn Val Gln Leu Thr Asp Ala Gly Thr Tyr
        115                 120                 125

Lys Cys Tyr Ile Ile Thr Ser Lys Gly Lys Gly Asn Ala Asn Leu Glu
    130                 135                 140

Tyr Lys Thr Gly Ala Phe Ser Met Pro Glu Val Asn Val Asp Tyr Asn
145                 150                 155                 160

Ala Ser Ser Glu Thr Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln
                165                 170                 175

Pro Thr Val Val Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser
            180                 185                 190

Glu Val Ser Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met
        195                 200                 205
```

```
Lys Val Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser
    210                 215                 220

Cys Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val
225                 230                 235                 240

Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn Ser
                245                 250                 255

Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp Ala Leu
            260                 265                 270

Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
        275                 280
```

<210> 8
<211> 220
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD28

<400> 8

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Met Leu Arg Leu Leu Leu Ala Leu Asn Leu Phe Pro Ser Ile Gln Val
1               5                   10                  15

Thr Gly Asn Lys Ile Leu Val Lys Gln Ser Pro Met Leu Val Ala Tyr
            20                  25                  30

Asp Asn Ala Val Asn Leu Ser Cys Lys Tyr Ser Tyr Asn Leu Phe Ser
        35                  40                  45

Arg Glu Phe Arg Ala Ser Leu His Lys Gly Leu Asp Ser Ala Val Glu
    50                  55                  60
```

```
Val Cys Val Val Tyr Gly Asn Tyr Ser Gln Gln Leu Gln Val Tyr Ser
65                  70                  75                  80

Lys Thr Gly Phe Asn Cys Asp Gly Lys Leu Gly Asn Glu Ser Val Thr
                85                  90                  95

Phe Tyr Leu Gln Asn Leu Tyr Val Asn Gln Thr Asp Ile Tyr Phe Cys
            100                 105                 110

Lys Ile Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Lys Ser
        115                 120                 125

Asn Gly Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro
    130                 135                 140

Leu Phe Pro Gly Pro Ser Lys Pro Phe Trp Val Leu Val Val Val Gly
145                 150                 155                 160

Gly Val Leu Ala Cys Tyr Ser Leu Leu Val Thr Val Ala Phe Ile Ile
                165                 170                 175

Phe Trp Val Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met
            180                 185                 190

Asn Met Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro
        195                 200                 205

Tyr Ala Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser
    210                 215                 220
```

<210> 9
<211> 223
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CTLA4

<400> 9

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Met Ala Cys Leu Gly Phe Gln Arg His Lys Ala Gln Leu Asn Leu Ala
1               5                  10                  15


Thr Arg Thr Trp Pro Cys Thr Leu Leu Phe Phe Leu Leu Phe Ile Pro
            20                  25                  30


Val Phe Cys Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala
        35                  40                  45


Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly
    50                  55                  60


Lys Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln
65                  70                  75                  80


Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr
                85                  90                  95


Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val
            100                 105                 110


Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile
        115                 120                 125


Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly
    130                 135                 140


Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser
145                 150                 155                 160


Asp Phe Leu Leu Trp Ile Leu Ala Ala Val Ser Ser Gly Leu Phe Phe
                165                 170                 175
```

```
Tyr Ser Phe Leu Leu Thr Ala Val Ser Leu Ser Lys Met Leu Lys Lys
            180                 185                 190


Arg Ser Pro Leu Thr Thr Gly Val Tyr Val Lys Met Pro Pro Thr Glu
        195                 200                 205


Pro Glu Cys Glu Lys Gln Phe Gln Pro Tyr Phe Ile Pro Ile Asn
    210                 215                 220


<210>  10
<211>  288
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  PDCD1(PD-1)

<400>  10

Met Gln Ile Pro Gln Ala Pro Trp Pro Val Val Trp Ala Val Leu Gln
1               5                   10                  15


Leu Gly Trp Arg Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro Trp
            20                  25                  30


Asn Pro Pro Thr Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly Asp
        35                  40                  45


Asn Ala Thr Phe Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe Val
    50                  55                  60


Leu Asn Trp Tyr Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu Ala
65                  70                  75                  80


Ala Phe Pro Glu Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe Arg
                85                  90                  95
```

```
Val Thr Gln Leu Pro Asn Gly Arg Asp Phe His Met Ser Val Val Arg
            100                 105                 110

Ala Arg Arg Asn Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser Leu
        115                 120                 125

Ala Pro Lys Ala Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg Val
    130                 135                 140

Thr Glu Arg Arg Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser Pro
145                 150                 155                 160

Arg Pro Ala Gly Gln Phe Gln Thr Leu Val Val Gly Val Val Gly Gly
                165                 170                 175

Leu Leu Gly Ser Leu Val Leu Leu Val Trp Val Leu Ala Val Ile Cys
            180                 185                 190

Ser Arg Ala Ala Arg Gly Thr Ile Gly Ala Arg Arg Thr Gly Gln Pro
        195                 200                 205

Leu Lys Glu Asp Pro Ser Ala Val Pro Val Phe Ser Val Asp Tyr Gly
    210                 215                 220

Glu Leu Asp Phe Gln Trp Arg Glu Lys Thr Pro Glu Pro Pro Val Pro
225                 230                 235                 240

Cys Val Pro Glu Gln Thr Glu Tyr Ala Thr Ile Val Phe Pro Ser Gly
                245                 250                 255

Met Gly Thr Ser Ser Pro Ala Arg Arg Gly Ser Ala Asp Gly Pro Arg
            260                 265                 270

Ser Ala Gln Pro Leu Arg Pro Glu Asp Gly His Cys Ser Trp Pro Leu
        275                 280                 285
```

<210> 11
<211> 199
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> ICOS

<400> 11

Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg Ile Lys
1 5 10 15

Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile
20 25 30

Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
35 40 45

Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp
50 55 60

Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
65 70 75 80

Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
85 90 95

Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
100 105 110

Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
115 120 125

His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
130 135 140

```
Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
145                 150                 155                 160


Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
                165                 170                 175


Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser
            180                 185                 190


Arg Leu Thr Asp Val Thr Leu
        195


<210>  12
<211>  289
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  BTLA(CD272)

<400>  12

Met Lys Thr Leu Pro Ala Met Leu Gly Thr Gly Lys Leu Phe Trp Val
1               5                   10                  15


Phe Phe Leu Ile Pro Tyr Leu Asp Ile Trp Asn Ile His Gly Lys Glu
            20                  25                  30


Ser Cys Asp Val Gln Leu Tyr Ile Lys Arg Gln Ser Glu His Ser Ile
        35                  40                  45


Leu Ala Gly Asp Pro Phe Glu Leu Glu Cys Pro Val Lys Tyr Cys Ala
    50                  55                  60


Asn Arg Pro His Val Thr Trp Cys Lys Leu Asn Gly Thr Thr Cys Val
65                  70                  75                  80
```

```
Lys Leu Glu Asp Arg Gln Thr Ser Trp Lys Glu Glu Lys Asn Ile Ser
                85                  90                  95

Phe Phe Ile Leu His Phe Glu Pro Val Leu Pro Asn Asp Asn Gly Ser
            100                 105                 110

Tyr Arg Cys Ser Ala Asn Phe Gln Ser Asn Leu Ile Glu Ser His Ser
        115                 120                 125

Thr Thr Leu Tyr Val Thr Asp Val Lys Ser Ala Ser Glu Arg Pro Ser
    130                 135                 140

Lys Asp Glu Met Ala Ser Arg Pro Trp Leu Leu Tyr Arg Leu Leu Pro
145                 150                 155                 160

Leu Gly Gly Leu Pro Leu Leu Ile Thr Thr Cys Phe Cys Leu Phe Cys
                165                 170                 175

Cys Leu Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser Asp Thr Ala
            180                 185                 190

Gly Arg Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser Glu Gln Thr
        195                 200                 205

Glu Ala Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser Glu Thr Gly
    210                 215                 220

Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln Glu Gly Ser
225                 230                 235                 240

Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro Gly Ile Val
                245                 250                 255

Tyr Ala Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser Arg Leu Ala
            260                 265                 270
```

```
Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile Cys Val Arg
        275                 280                 285


Ser



<210>  13
<211>  458
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD4

<400>  13

Met Asn Arg Gly Val Pro Phe Arg His Leu Leu Leu Val Leu Gln Leu
1               5                   10                  15


Ala Leu Leu Pro Ala Ala Thr Gln Gly Lys Lys Val Val Leu Gly Lys
            20                  25                  30


Lys Gly Asp Thr Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser
        35                  40                  45


Ile Gln Phe His Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn
    50                  55                  60


Gln Gly Ser Phe Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala
65                  70                  75                  80


Asp Ser Arg Arg Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile
                85                  90                  95


Lys Asn Leu Lys Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu Val Glu
            100                 105                 110
```

```
Asp Gln Lys Glu Glu Val Gln Leu Leu Val Phe Gly Leu Thr Ala Asn
        115                 120                 125

Ser Asp Thr His Leu Leu Gln Gly Gln Ser Leu Thr Leu Thr Leu Glu
    130                 135                 140

Ser Pro Pro Gly Ser Ser Pro Ser Val Gln Cys Arg Ser Pro Arg Gly
145                 150                 155                 160

Lys Asn Ile Gln Gly Gly Lys Thr Leu Ser Val Ser Gln Leu Glu Leu
                165                 170                 175

Gln Asp Ser Gly Thr Trp Thr Cys Thr Val Leu Gln Asn Gln Lys Lys
            180                 185                 190

Val Glu Phe Lys Ile Asp Ile Val Val Leu Ala Phe Gln Lys Ala Ser
        195                 200                 205

Ser Ile Val Tyr Lys Lys Glu Gly Glu Gln Val Glu Phe Ser Phe Pro
    210                 215                 220

Leu Ala Phe Thr Val Glu Lys Leu Thr Gly Ser Gly Glu Leu Trp Trp
225                 230                 235                 240

Gln Ala Glu Arg Ala Ser Ser Ser Lys Ser Trp Ile Thr Phe Asp Leu
                245                 250                 255

Lys Asn Lys Glu Val Ser Val Lys Arg Val Thr Gln Asp Pro Lys Leu
            260                 265                 270

Gln Met Gly Lys Lys Leu Pro Leu His Leu Thr Leu Pro Gln Ala Leu
        275                 280                 285

Pro Gln Tyr Ala Gly Ser Gly Asn Leu Thr Leu Ala Leu Glu Ala Lys
    290                 295                 300
```

```
Thr Gly Lys Leu His Gln Glu Val Asn Leu Val Val Met Arg Ala Thr
305                 310                 315                 320

Gln Leu Gln Lys Asn Leu Thr Cys Glu Val Trp Gly Pro Thr Ser Pro
                325                 330                 335

Lys Leu Met Leu Ser Leu Lys Leu Glu Asn Lys Glu Ala Lys Val Ser
            340                 345                 350

Lys Arg Glu Lys Ala Val Trp Val Leu Asn Pro Glu Ala Gly Met Trp
        355                 360                 365

Gln Cys Leu Leu Ser Asp Ser Gly Gln Val Leu Leu Glu Ser Asn Ile
    370                 375                 380

Lys Val Leu Pro Thr Trp Ser Thr Pro Val Gln Pro Met Ala Leu Ile
385                 390                 395                 400

Val Leu Gly Gly Val Ala Gly Leu Leu Leu Phe Ile Gly Leu Gly Ile
                405                 410                 415

Phe Phe Cys Val Arg Cys Arg His Arg Arg Arg Gln Ala Glu Arg Met
            420                 425                 430

Ser Gln Ile Lys Arg Leu Leu Ser Glu Lys Lys Thr Cys Gln Cys Pro
        435                 440                 445

His Arg Phe Gln Lys Thr Cys Ser Pro Ile
    450                 455
```

<210> 14
<211> 235
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD8A(CD8-alpha)

<400> 14

```
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1               5                  10                  15


His Ala Ala Arg Pro Ser Gln Phe Arg Val Ser Pro Leu Asp Arg Thr
            20                  25                  30


Trp Asn Leu Gly Glu Thr Val Glu Leu Lys Cys Gln Val Leu Leu Ser
        35                  40                  45


Asn Pro Thr Ser Gly Cys Ser Trp Leu Phe Gln Pro Arg Gly Ala Ala
    50                  55                  60


Ala Ser Pro Thr Phe Leu Leu Tyr Leu Ser Gln Asn Lys Pro Lys Ala
65                  70                  75                  80


Ala Glu Gly Leu Asp Thr Gln Arg Phe Ser Gly Lys Arg Leu Gly Asp
                85                  90                  95


Thr Phe Val Leu Thr Leu Ser Asp Phe Arg Arg Glu Asn Glu Gly Tyr
            100                 105                 110


Tyr Phe Cys Ser Ala Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe
        115                 120                 125


Val Pro Val Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg
    130                 135                 140


Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
145                 150                 155                 160


Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
                165                 170                 175
```

```
Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
            180                 185                 190


Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His
        195                 200                 205


Arg Asn Arg Arg Arg Val Cys Lys Cys Pro Arg Pro Val Val Lys Ser
    210                 215                 220


Gly Asp Lys Pro Ser Leu Ser Ala Arg Tyr Val
225                 230                 235


<210>  15
<211>  210
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD8B(CD8-beta)

<400>  15

Met Arg Pro Arg Leu Trp Leu Leu Leu Ala Ala Gln Leu Thr Val Leu
1               5                   10                  15


His Gly Asn Ser Val Leu Gln Gln Thr Pro Ala Tyr Ile Lys Val Gln
            20                  25                  30


Thr Asn Lys Met Val Met Leu Ser Cys Glu Ala Lys Ile Ser Leu Ser
        35                  40                  45


Asn Met Arg Ile Tyr Trp Leu Arg Gln Arg Gln Ala Pro Ser Ser Asp
    50                  55                  60


Ser His His Glu Phe Leu Ala Leu Trp Asp Ser Ala Lys Gly Thr Ile
65                  70                  75                  80
```

```
His Gly Glu Glu Val Glu Gln Glu Lys Ile Ala Val Phe Arg Asp Ala
                85                  90                  95

Ser Arg Phe Ile Leu Asn Leu Thr Ser Val Lys Pro Glu Asp Ser Gly
            100                 105                 110

Ile Tyr Phe Cys Met Ile Val Gly Ser Pro Glu Leu Thr Phe Gly Lys
        115                 120                 125

Gly Thr Gln Leu Ser Val Val Asp Phe Leu Pro Thr Thr Ala Gln Pro
    130                 135                 140

Thr Lys Lys Ser Thr Leu Lys Lys Arg Val Cys Arg Leu Pro Arg Pro
145                 150                 155                 160

Glu Thr Gln Lys Gly Pro Leu Cys Ser Pro Ile Thr Leu Gly Leu Leu
                165                 170                 175

Val Ala Gly Val Leu Val Leu Leu Val Ser Leu Gly Val Ala Ile His
            180                 185                 190

Leu Cys Cys Arg Arg Arg Arg Ala Arg Leu Arg Phe Met Lys Gln Phe
        195                 200                 205

Tyr Lys
    210
```

<210> 16
<211> 525
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> LAG3

<400> 16

```
Met Trp Glu Ala Gln Phe Leu Gly Leu Leu Phe Leu Gln Pro Leu Trp
1               5                  10                  15

Val Ala Pro Val Lys Pro Leu Gln Pro Gly Ala Glu Val Pro Val Val
            20                  25                  30

Trp Ala Gln Glu Gly Ala Pro Ala Gln Leu Pro Cys Ser Pro Thr Ile
        35                  40                  45

Pro Leu Gln Asp Leu Ser Leu Leu Arg Arg Ala Gly Val Thr Trp Gln
    50                  55                  60

His Gln Pro Asp Ser Gly Pro Pro Ala Ala Ala Pro Gly His Pro Leu
65                  70                  75                  80

Ala Pro Gly Pro His Pro Ala Ala Pro Ser Ser Trp Gly Pro Arg Pro
                85                  90                  95

Arg Arg Tyr Thr Val Leu Ser Val Gly Pro Gly Gly Leu Arg Ser Gly
            100                 105                 110

Arg Leu Pro Leu Gln Pro Arg Val Gln Leu Asp Glu Arg Gly Arg Gln
        115                 120                 125

Arg Gly Asp Phe Ser Leu Trp Leu Arg Pro Ala Arg Arg Ala Asp Ala
    130                 135                 140

Gly Glu Tyr Arg Ala Ala Val His Leu Arg Asp Arg Ala Leu Ser Cys
145                 150                 155                 160

Arg Leu Arg Leu Arg Leu Gly Gln Ala Ser Met Thr Ala Ser Pro Pro
                165                 170                 175

Gly Ser Leu Arg Ala Ser Asp Trp Val Ile Leu Asn Cys Ser Phe Ser
            180                 185                 190
```

```
Arg Pro Asp Arg Pro Ala Ser Val His Trp Phe Arg Asn Arg Gly Gln
        195                 200                 205

Gly Arg Val Pro Val Arg Glu Ser Pro His His His Leu Ala Glu Ser
    210                 215                 220

Phe Leu Phe Leu Pro Gln Val Ser Pro Met Asp Ser Gly Pro Trp Gly
225                 230                 235                 240

Cys Ile Leu Thr Tyr Arg Asp Gly Phe Asn Val Ser Ile Met Tyr Asn
                245                 250                 255

Leu Thr Val Leu Gly Leu Glu Pro Pro Thr Pro Leu Thr Val Tyr Ala
            260                 265                 270

Gly Ala Gly Ser Arg Val Gly Leu Pro Cys Arg Leu Pro Ala Gly Val
        275                 280                 285

Gly Thr Arg Ser Phe Leu Thr Ala Lys Trp Thr Pro Pro Gly Gly Gly
    290                 295                 300

Pro Asp Leu Leu Val Thr Gly Asp Asn Gly Asp Phe Thr Leu Arg Leu
305                 310                 315                 320

Glu Asp Val Ser Gln Ala Gln Ala Gly Thr Tyr Thr Cys His Ile His
                325                 330                 335

Leu Gln Glu Gln Gln Leu Asn Ala Thr Val Thr Leu Ala Ile Ile Thr
            340                 345                 350

Val Thr Pro Lys Ser Phe Gly Ser Pro Gly Ser Leu Gly Lys Leu Leu
        355                 360                 365

Cys Glu Val Thr Pro Val Ser Gly Gln Glu Arg Phe Val Trp Ser Ser
    370                 375                 380
```

```
Leu Asp Thr Pro Ser Gln Arg Ser Phe Ser Gly Pro Trp Leu Glu Ala
385                 390                 395                 400


Gln Glu Ala Gln Leu Leu Ser Gln Pro Trp Gln Cys Gln Leu Tyr Gln
                405                 410                 415


Gly Glu Arg Leu Leu Gly Ala Ala Val Tyr Phe Thr Glu Leu Ser Ser
            420                 425                 430


Pro Gly Ala Gln Arg Ser Gly Arg Ala Pro Gly Ala Leu Pro Ala Gly
        435                 440                 445


His Leu Leu Leu Phe Leu Ile Leu Gly Val Leu Ser Leu Leu Leu Leu
    450                 455                 460


Val Thr Gly Ala Phe Gly Phe His Leu Trp Arg Arg Gln Trp Arg Pro
465                 470                 475                 480


Arg Arg Phe Ser Ala Leu Glu Gln Gly Ile His Pro Pro Gln Ala Gln
                485                 490                 495


Ser Lys Ile Glu Glu Leu Glu Gln Glu Pro Glu Pro Glu Pro Glu Pro
            500                 505                 510


Glu Pro Glu Pro Glu Pro Glu Pro Glu Pro Glu Gln Leu
        515                 520                 525


<210>  17
<211>  301
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  HAVCR2(TIM-3)
```

<400> 17

```
Met Phe Ser His Leu Pro Phe Asp Cys Val Leu Leu Leu Leu Leu Leu
1               5                  10                  15

Leu Leu Thr Arg Ser Ser Glu Val Glu Tyr Arg Ala Glu Val Gly Gln
            20                  25                  30

Asn Ala Tyr Leu Pro Cys Phe Tyr Thr Pro Ala Ala Pro Gly Asn Leu
        35                  40                  45

Val Pro Val Cys Trp Gly Lys Gly Ala Cys Pro Val Phe Glu Cys Gly
    50                  55                  60

Asn Val Val Leu Arg Thr Asp Glu Arg Asp Val Asn Tyr Trp Thr Ser
65                  70                  75                  80

Arg Tyr Trp Leu Asn Gly Asp Phe Arg Lys Gly Asp Val Ser Leu Thr
                85                  90                  95

Ile Glu Asn Val Thr Leu Ala Asp Ser Gly Ile Tyr Cys Cys Arg Ile
            100                 105                 110

Gln Ile Pro Gly Ile Met Asn Asp Glu Lys Phe Asn Leu Lys Leu Val
        115                 120                 125

Ile Lys Pro Ala Lys Val Thr Pro Ala Pro Thr Arg Gln Arg Asp Phe
    130                 135                 140

Thr Ala Ala Phe Pro Arg Met Leu Thr Thr Arg Gly His Gly Pro Ala
145                 150                 155                 160

Glu Thr Gln Thr Leu Gly Ser Leu Pro Asp Ile Asn Leu Thr Gln Ile
                165                 170                 175

Ser Thr Leu Ala Asn Glu Leu Arg Asp Ser Arg Leu Ala Asn Asp Leu
            180                 185                 190
```

```
Arg Asp Ser Gly Ala Thr Ile Arg Ile Gly Ile Tyr Ile Gly Ala Gly
        195                 200                 205


Ile Cys Ala Gly Leu Ala Leu Ala Leu Ile Phe Gly Ala Leu Ile Phe
    210                 215                 220


Lys Trp Tyr Ser His Ser Lys Glu Lys Ile Gln Asn Leu Ser Leu Ile
225                 230                 235                 240


Ser Leu Ala Asn Leu Pro Pro Ser Gly Leu Ala Asn Ala Val Ala Glu
                245                 250                 255


Gly Ile Arg Ser Glu Glu Asn Ile Tyr Thr Ile Glu Glu Asn Val Tyr
            260                 265                 270


Glu Val Glu Glu Pro Asn Glu Tyr Tyr Cys Tyr Val Ser Ser Arg Gln
        275                 280                 285


Gln Pro Ser Gln Pro Leu Gly Cys Arg Phe Ala Met Pro
    290                 295                 300


<210>  18
<211>  526
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CEACAM1

<400>  18

Met Gly His Leu Ser Ala Pro Leu His Arg Val Arg Val Pro Trp Gln
1               5                   10                  15


Gly Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr
            20                  25                  30
```

```
Thr Ala Gln Leu Thr Thr Glu Ser Met Pro Phe Asn Val Ala Glu Gly
        35                  40                  45

Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln Gln Leu Phe Gly
    50                  55                  60

Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Val
65                  70                  75                  80

Gly Tyr Ala Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Asn Ser
                85                  90                  95

Gly Arg Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Val
            100                 105                 110

Thr Gln Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp
        115                 120                 125

Leu Val Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Pro Glu Leu
    130                 135                 140

Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys
145                 150                 155                 160

Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Thr Thr Tyr
                165                 170                 175

Leu Trp Trp Ile Asn Asn Gln Ser Leu Pro Val Ser Pro Arg Leu Gln
            180                 185                 190

Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Leu Ser Val Thr Arg Asn
        195                 200                 205

Asp Thr Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Val Ser Ala Asn
    210                 215                 220
```

```
Arg Ser Asp Pro Val Thr Leu Asn Val Thr Tyr Gly Pro Asp Thr Pro
225                 230                 235                 240

Thr Ile Ser Pro Ser Asp Thr Tyr Tyr Arg Pro Gly Ala Asn Leu Ser
                245                 250                 255

Leu Ser Cys Tyr Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Leu
            260                 265                 270

Ile Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn
        275                 280                 285

Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys His Ala Asn Asn Ser
    290                 295                 300

Val Thr Gly Cys Asn Arg Thr Thr Val Lys Thr Ile Ile Val Thr Glu
305                 310                 315                 320

Leu Ser Pro Val Val Ala Lys Pro Gln Ile Lys Ala Ser Lys Thr Thr
                325                 330                 335

Val Thr Gly Asp Lys Asp Ser Val Asn Leu Thr Cys Ser Thr Asn Asp
            340                 345                 350

Thr Gly Ile Ser Ile Arg Trp Phe Phe Lys Asn Gln Ser Leu Pro Ser
        355                 360                 365

Ser Glu Arg Met Lys Leu Ser Gln Gly Asn Thr Thr Leu Ser Ile Asn
    370                 375                 380

Pro Val Lys Arg Glu Asp Ala Gly Thr Tyr Trp Cys Glu Val Phe Asn
385                 390                 395                 400

Pro Ile Ser Lys Asn Gln Ser Asp Pro Ile Met Leu Asn Val Asn Tyr
                405                 410                 415
```

```
Asn Ala Leu Pro Gln Glu Asn Gly Leu Ser Pro Gly Ala Ile Ala Gly
            420                 425                 430


Ile Val Ile Gly Val Val Ala Leu Val Ala Leu Ile Ala Val Ala Leu
        435                 440                 445


Ala Cys Phe Leu His Phe Gly Lys Thr Gly Arg Ala Ser Asp Gln Arg
    450                 455                 460


Asp Leu Thr Glu His Lys Pro Ser Val Ser Asn His Thr Gln Asp His
465                 470                 475                 480


Ser Asn Asp Pro Pro Asn Lys Met Asn Glu Val Thr Tyr Ser Thr Leu
                485                 490                 495


Asn Phe Glu Ala Gln Gln Pro Thr Gln Pro Thr Ser Ala Ser Pro Ser
            500                 505                 510


Leu Thr Ala Thr Glu Ile Ile Tyr Ser Glu Val Lys Lys Gln
        515                 520                 525


<210>  19
<211>  244
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  TIGIT

<400>  19

Met Arg Trp Cys Leu Leu Leu Ile Trp Ala Gln Gly Leu Arg Gln Ala
1               5                   10                  15


Pro Leu Ala Ser Gly Met Met Thr Gly Thr Ile Glu Thr Thr Gly Asn
            20                  25                  30
```

```
Ile Ser Ala Glu Lys Gly Gly Ser Ile Ile Leu Gln Cys His Leu Ser
        35                  40                  45

Ser Thr Thr Ala Gln Val Thr Gln Val Asn Trp Glu Gln Gln Asp Gln
    50                  55                  60

Leu Leu Ala Ile Cys Asn Ala Asp Leu Gly Trp His Ile Ser Pro Ser
65                  70                  75                  80

Phe Lys Asp Arg Val Ala Pro Gly Pro Gly Leu Gly Leu Thr Leu Gln
                85                  90                  95

Ser Leu Thr Val Asn Asp Thr Gly Glu Tyr Phe Cys Ile Tyr His Thr
            100                 105                 110

Tyr Pro Asp Gly Thr Tyr Thr Gly Arg Ile Phe Leu Glu Val Leu Glu
        115                 120                 125

Ser Ser Val Ala Glu His Gly Ala Arg Phe Gln Ile Pro Leu Leu Gly
    130                 135                 140

Ala Met Ala Ala Thr Leu Val Val Ile Cys Thr Ala Val Ile Val Val
145                 150                 155                 160

Val Ala Leu Thr Arg Lys Lys Lys Ala Leu Arg Ile His Ser Val Glu
                165                 170                 175

Gly Asp Leu Arg Arg Lys Ser Ala Gly Gln Glu Glu Trp Ser Pro Ser
            180                 185                 190

Ala Pro Ser Pro Pro Gly Ser Cys Val Gln Ala Glu Ala Ala Pro Ala
        195                 200                 205

Gly Leu Cys Gly Glu Gln Arg Gly Glu Asp Cys Ala Glu Leu His Asp
    210                 215                 220
```

```
Tyr Phe Asn Val Leu Ser Tyr Arg Ser Leu Gly Asn Cys Ser Phe Phe
225                 230                 235                 240


Thr Glu Thr Gly



<210>  20
<211>  417
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  PVR(CD155)

<400>  20

Met Ala Arg Ala Met Ala Ala Ala Trp Pro Leu Leu Leu Val Ala Leu
1               5                   10                  15


Leu Val Leu Ser Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln
            20                  25                  30


Ala Pro Thr Gln Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro
        35                  40                  45


Cys Tyr Leu Gln Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu
    50                  55                  60


Thr Trp Ala Arg His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln
65                  70                  75                  80


Thr Gln Gly Pro Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala
                85                  90                  95


Ala Arg Leu Gly Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly
            100                 105                 110
```

```
Leu Arg Val Glu Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe
        115                 120                 125

Pro Gln Gly Ser Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys
    130                 135                 140

Pro Gln Asn Thr Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro
145                 150                 155                 160

Val Pro Met Ala Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln
                165                 170                 175

Ile Thr Trp His Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val
            180                 185                 190

Pro Gly Phe Leu Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu
        195                 200                 205

Val Pro Ser Ser Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu
    210                 215                 220

His Glu Ser Phe Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val
225                 230                 235                 240

Tyr Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr
                245                 250                 255

Leu Gly Gln Asn Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro
            260                 265                 270

Glu Pro Thr Gly Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro
        275                 280                 285

Phe Ala Val Ala Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys
    290                 295                 300
```

```
Pro Ile Asn Thr Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala
305                 310                 315                 320


Arg Gln Ala Glu Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu
                325                 330                 335


His Ser Gly Ile Ser Arg Asn Ala Ile Ile Phe Leu Val Leu Gly Ile
            340                 345                 350


Leu Val Phe Leu Ile Leu Leu Gly Ile Gly Ile Tyr Phe Tyr Trp Ser
        355                 360                 365


Lys Cys Ser Arg Glu Val Leu Trp His Cys His Leu Cys Pro Ser Ser
    370                 375                 380


Thr Glu His Ala Ser Ala Ser Ala Asn Gly His Val Ser Tyr Ser Ala
385                 390                 395                 400


Val Ser Arg Glu Asn Ser Ser Ser Gln Asp Pro Gln Thr Glu Gly Thr
                405                 410                 415


Arg



<210>  21
<211>  538
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  PVRL2(CD112)

<400>  21

Met Ala Arg Ala Ala Ala Leu Leu Pro Ser Arg Ser Pro Pro Thr Pro
1               5                   10                  15
```

```
Leu Leu Trp Pro Leu Leu Leu Leu Leu Leu Leu Glu Thr Gly Ala Gln
            20                  25                  30

Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly Gly
        35                  40                  45

Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu Tyr
    50                  55                  60

Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His Gln
65                  70                  75                  80

Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser Pro
                85                  90                  95

Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser Thr
            100                 105                 110

Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu His
        115                 120                 125

Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala Thr
    130                 135                 140

Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile Ala
145                 150                 155                 160

Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln Asp
                165                 170                 175

Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro Ala
            180                 185                 190

Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr Gln
        195                 200                 205
```

```
Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe Thr
    210                 215                 220

Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys Val
225                 230                 235                 240

Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu Ser
                245                 250                 255

Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn Trp
            260                 265                 270

Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser Asn
        275                 280                 285

Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe Pro
    290                 295                 300

Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val Asp
305                 310                 315                 320

Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val Gly
                325                 330                 335

Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn Thr
            340                 345                 350

Ala Gly Ala Gly Ala Thr Gly Gly Ile Ile Gly Gly Ile Ile Ala Ala
        355                 360                 365

Ile Ile Ala Thr Ala Val Ala Ala Thr Gly Ile Leu Ile Cys Arg Gln
    370                 375                 380

Gln Arg Lys Glu Gln Thr Leu Gln Gly Ala Glu Glu Asp Glu Asp Leu
385                 390                 395                 400
```

```
Glu Gly Pro Pro Ser Tyr Lys Pro Pro Thr Pro Lys Ala Lys Leu Glu
                405                 410                 415

Ala Gln Glu Met Pro Ser Gln Leu Phe Thr Leu Gly Ala Ser Glu His
            420                 425                 430

Ser Pro Leu Lys Thr Pro Tyr Phe Asp Ala Gly Ala Ser Cys Thr Glu
        435                 440                 445

Gln Glu Met Pro Arg Tyr His Glu Leu Pro Thr Leu Glu Glu Arg Ser
    450                 455                 460

Gly Pro Leu His Pro Gly Ala Thr Ser Leu Gly Ser Pro Ile Pro Val
465                 470                 475                 480

Pro Pro Gly Pro Pro Ala Val Glu Asp Val Ser Leu Asp Leu Glu Asp
                485                 490                 495

Glu Glu Gly Glu Glu Glu Glu Glu Tyr Leu Asp Lys Ile Asn Pro Ile
            500                 505                 510

Tyr Asp Ala Leu Ser Tyr Ser Ser Pro Ser Asp Ser Tyr Gln Gly Lys
        515                 520                 525

Gly Phe Val Met Ser Arg Ala Met Tyr Val
    530                 535
```

<210> 22
<211> 336
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD226

<400> 22

```
Met Asp Tyr Pro Thr Leu Leu Leu Ala Leu Leu His Val Tyr Arg Ala
1               5                  10                  15

Leu Cys Glu Glu Val Leu Trp His Thr Ser Val Pro Phe Ala Glu Asn
            20                  25                  30

Met Ser Leu Glu Cys Val Tyr Pro Ser Met Gly Ile Leu Thr Gln Val
        35                  40                  45

Glu Trp Phe Lys Ile Gly Thr Gln Gln Asp Ser Ile Ala Ile Phe Ser
    50                  55                  60

Pro Thr His Gly Met Val Ile Arg Lys Pro Tyr Ala Glu Arg Val Tyr
65                  70                  75                  80

Phe Leu Asn Ser Thr Met Ala Ser Asn Asn Met Thr Leu Phe Phe Arg
                85                  90                  95

Asn Ala Ser Glu Asp Asp Val Gly Tyr Tyr Ser Cys Ser Leu Tyr Thr
            100                 105                 110

Tyr Pro Gln Gly Thr Trp Gln Lys Val Ile Gln Val Val Gln Ser Asp
        115                 120                 125

Ser Phe Glu Ala Ala Val Pro Ser Asn Ser His Ile Val Ser Glu Pro
    130                 135                 140

Gly Lys Asn Val Thr Leu Thr Cys Gln Pro Gln Met Thr Trp Pro Val
145                 150                 155                 160

Gln Ala Val Arg Trp Glu Lys Ile Gln Pro Arg Gln Ile Asp Leu Leu
                165                 170                 175

Thr Tyr Cys Asn Leu Val His Gly Arg Asn Phe Thr Ser Lys Phe Pro
            180                 185                 190
```

```
Arg Gln Ile Val Ser Asn Cys Ser His Gly Arg Trp Ser Val Ile Val
        195                 200                 205

Ile Pro Asp Val Thr Val Ser Asp Ser Gly Leu Tyr Arg Cys Tyr Leu
    210                 215                 220

Gln Ala Ser Ala Gly Glu Asn Glu Thr Phe Val Met Arg Leu Thr Val
225                 230                 235                 240

Ala Glu Gly Lys Thr Asp Asn Gln Tyr Thr Leu Phe Val Ala Gly Gly
                245                 250                 255

Thr Val Leu Leu Leu Leu Phe Val Ile Ser Ile Thr Thr Ile Ile Val
            260                 265                 270

Ile Phe Leu Asn Arg Arg Arg Arg Arg Glu Arg Arg Asp Leu Phe Thr
        275                 280                 285

Glu Ser Trp Asp Thr Gln Lys Ala Pro Asn Asn Tyr Arg Ser Pro Ile
    290                 295                 300

Ser Thr Ser Gln Pro Thr Asn Gln Ser Met Asp Asp Thr Arg Glu Asp
305                 310                 315                 320

Ile Tyr Val Asn Tyr Pro Thr Phe Ser Arg Arg Pro Lys Thr Arg Val
                325                 330                 335
```

<210> 23
<211> 351
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD2

<400> 23

```
Met Ser Phe Pro Cys Lys Phe Val Ala Ser Phe Leu Leu Ile Phe Asn
1               5                  10                  15

Val Ser Ser Lys Gly Ala Val Ser Lys Glu Ile Thr Asn Ala Leu Glu
            20                  25                  30

Thr Trp Gly Ala Leu Gly Gln Asp Ile Asn Leu Asp Ile Pro Ser Phe
        35                  40                  45

Gln Met Ser Asp Asp Ile Asp Asp Ile Lys Trp Glu Lys Thr Ser Asp
    50                  55                  60

Lys Lys Lys Ile Ala Gln Phe Arg Lys Glu Lys Glu Thr Phe Lys Glu
65                  70                  75                  80

Lys Asp Thr Tyr Lys Leu Phe Lys Asn Gly Thr Leu Lys Ile Lys His
                85                  90                  95

Leu Lys Thr Asp Asp Gln Asp Ile Tyr Lys Val Ser Ile Tyr Asp Thr
            100                 105                 110

Lys Gly Lys Asn Val Leu Glu Lys Ile Phe Asp Leu Lys Ile Gln Glu
        115                 120                 125

Arg Val Ser Lys Pro Lys Ile Ser Trp Thr Cys Ile Asn Thr Thr Leu
    130                 135                 140

Thr Cys Glu Val Met Asn Gly Thr Asp Pro Glu Leu Asn Leu Tyr Gln
145                 150                 155                 160

Asp Gly Lys His Leu Lys Leu Ser Gln Arg Val Ile Thr His Lys Trp
                165                 170                 175

Thr Thr Ser Leu Ser Ala Lys Phe Lys Cys Thr Ala Gly Asn Lys Val
            180                 185                 190
```

```
Ser Lys Glu Ser Ser Val Glu Pro Val Ser Cys Pro Glu Lys Gly Leu
        195                 200                 205

Asp Ile Tyr Leu Ile Ile Gly Ile Cys Gly Gly Gly Ser Leu Leu Met
    210                 215                 220

Val Phe Val Ala Leu Leu Val Phe Tyr Ile Thr Lys Arg Lys Lys Gln
225                 230                 235                 240

Arg Ser Arg Arg Asn Asp Glu Glu Leu Glu Thr Arg Ala His Arg Val
                245                 250                 255

Ala Thr Glu Glu Arg Gly Arg Lys Pro His Gln Ile Pro Ala Ser Thr
            260                 265                 270

Pro Gln Asn Pro Ala Thr Ser Gln His Pro Pro Pro Pro Pro Gly His
        275                 280                 285

Arg Ser Gln Ala Pro Ser His Arg Pro Pro Pro Pro Gly His Arg Val
    290                 295                 300

Gln His Gln Pro Gln Lys Arg Pro Pro Ala Pro Ser Gly Thr Gln Val
305                 310                 315                 320

His Gln Gln Lys Gly Pro Pro Leu Pro Arg Pro Arg Val Gln Pro Lys
                325                 330                 335

Pro Pro His Gly Ala Ala Glu Asn Ser Leu Ser Pro Ser Ser Asn
            340                 345                 350
```

<210> 24
<211> 180
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD160

<400> 24

```
Met Leu Leu Glu Pro Gly Arg Gly Cys Cys Ala Leu Ala Ile Leu Leu
1               5                  10                  15


Ala Ile Val Asp Ile Gln Ser Gly Gly Cys Ile Asn Ile Thr Ser Ser
            20                  25                  30


Ala Ser Gln Glu Gly Thr Arg Leu Asn Leu Ile Cys Thr Val Trp His
        35                  40                  45


Lys Lys Glu Glu Ala Glu Gly Phe Val Val Phe Leu Cys Lys Asp Arg
    50                  55                  60


Ser Gly Asp Cys Ser Pro Glu Thr Ser Leu Lys Gln Leu Arg Leu Lys
65                  70                  75                  80


Arg Asp Pro Gly Ile Asp Gly Val Gly Glu Ile Ser Ser Gln Leu Met
                85                  90                  95


Phe Thr Ile Ser Gln Val Thr Pro Leu His Ser Gly Thr Tyr Gln Cys
            100                 105                 110


Cys Ala Arg Ser Gln Lys Ser Gly Ile Arg Leu Gln Gly His Phe Phe
        115                 120                 125


Ser Ile Leu Phe Thr Glu Thr Gly Asn Tyr Thr Val Thr Gly Leu Lys
    130                 135                 140


Gln Arg Gln His Leu Glu Phe Ser His Asn Glu Gly Thr Leu Ser Ser
145                 150                 155                 160


Gly Phe Leu Gln Glu Lys Val Trp Val Met Leu Val Thr Ser Leu Val
                165                 170                 175
```

Ala Leu Gln Ala
180

<210> 25
<211> 278
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD200

<400> 25

Met Glu Arg Leu Val Ile Arg Met Pro Phe Ser His Leu Ser Thr Tyr
1 5 10 15

Ser Leu Val Trp Val Met Ala Ala Val Val Leu Cys Thr Ala Gln Val
20 25 30

Gln Val Val Thr Gln Asp Glu Arg Glu Gln Leu Tyr Thr Pro Ala Ser
35 40 45

Leu Lys Cys Ser Leu Gln Asn Ala Gln Glu Ala Leu Ile Val Thr Trp
50 55 60

Gln Lys Lys Lys Ala Val Ser Pro Glu Asn Met Val Thr Phe Ser Glu
65 70 75 80

Asn His Gly Val Val Ile Gln Pro Ala Tyr Lys Asp Lys Ile Asn Ile
85 90 95

Thr Gln Leu Gly Leu Gln Asn Ser Thr Ile Thr Phe Trp Asn Ile Thr
100 105 110

Leu Glu Asp Glu Gly Cys Tyr Met Cys Leu Phe Asn Thr Phe Gly Phe
115 120 125

```
Gly Lys Ile Ser Gly Thr Ala Cys Leu Thr Val Tyr Val Gln Pro Ile
    130                 135                 140

Val Ser Leu His Tyr Lys Phe Ser Glu Asp His Leu Asn Ile Thr Cys
145                 150                 155                 160

Ser Ala Thr Ala Arg Pro Ala Pro Met Val Phe Trp Lys Val Pro Arg
                165                 170                 175

Ser Gly Ile Glu Asn Ser Thr Val Thr Leu Ser His Pro Asn Gly Thr
            180                 185                 190

Thr Ser Val Thr Ser Ile Leu His Ile Lys Asp Pro Lys Asn Gln Val
        195                 200                 205

Gly Lys Glu Val Ile Cys Gln Val Leu His Leu Gly Thr Val Thr Asp
    210                 215                 220

Phe Lys Gln Thr Val Asn Lys Gly Tyr Trp Phe Ser Val Pro Leu Leu
225                 230                 235                 240

Leu Ser Ile Val Ser Leu Val Ile Leu Leu Val Leu Ile Ser Ile Leu
                245                 250                 255

Leu Tyr Trp Lys Arg His Arg Asn Gln Asp Arg Gly Glu Leu Ser Gln
            260                 265                 270

Gly Val Gln Lys Met Thr
        275
```

<210> 26
<211> 325
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD200R1(CD200R)

<400> 26

```
Met Leu Cys Pro Trp Arg Thr Ala Asn Leu Gly Leu Leu Leu Ile Leu
1               5                  10                  15


Thr Ile Phe Leu Val Ala Ala Ser Ser Ser Leu Cys Met Asp Glu Lys
            20                  25                  30


Gln Ile Thr Gln Asn Tyr Ser Lys Val Leu Ala Glu Val Asn Thr Ser
        35                  40                  45


Trp Pro Val Lys Met Ala Thr Asn Ala Val Leu Cys Cys Pro Pro Ile
    50                  55                  60


Ala Leu Arg Asn Leu Ile Ile Ile Thr Trp Glu Ile Ile Leu Arg Gly
65                  70                  75                  80


Gln Pro Ser Cys Thr Lys Ala Tyr Arg Lys Glu Thr Asn Glu Thr Lys
                85                  90                  95


Glu Thr Asn Cys Thr Asp Glu Arg Ile Thr Trp Val Ser Arg Pro Asp
            100                 105                 110


Gln Asn Ser Asp Leu Gln Ile Arg Pro Val Ala Ile Thr His Asp Gly
        115                 120                 125


Tyr Tyr Arg Cys Ile Met Val Thr Pro Asp Gly Asn Phe His Arg Gly
    130                 135                 140


Tyr His Leu Gln Val Leu Val Thr Pro Glu Val Thr Leu Phe Gln Asn
145                 150                 155                 160


Arg Asn Arg Thr Ala Val Cys Lys Ala Val Ala Gly Lys Pro Ala Ala
                165                 170                 175
```

```
Gln Ile Ser Trp Ile Pro Glu Gly Asp Cys Ala Thr Lys Gln Glu Tyr
            180                 185                 190

Trp Ser Asn Gly Thr Val Thr Val Lys Ser Thr Cys His Trp Glu Val
        195                 200                 205

His Asn Val Ser Thr Val Thr Cys His Val Ser His Leu Thr Gly Asn
    210                 215                 220

Lys Ser Leu Tyr Ile Glu Leu Leu Pro Val Pro Gly Ala Lys Lys Ser
225                 230                 235                 240

Ala Lys Leu Tyr Ile Pro Tyr Ile Ile Leu Thr Ile Ile Ile Leu Thr
                245                 250                 255

Ile Val Gly Phe Ile Trp Leu Leu Lys Val Asn Gly Cys Arg Lys Tyr
            260                 265                 270

Lys Leu Asn Lys Thr Glu Ser Thr Pro Val Val Glu Glu Asp Glu Met
        275                 280                 285

Gln Pro Tyr Ala Ser Tyr Thr Glu Lys Asn Asn Pro Leu Tyr Asp Thr
    290                 295                 300

Thr Asn Lys Val Lys Ala Ser Glu Ala Leu Gln Ser Glu Val Asp Thr
305                 310                 315                 320

Asp Leu His Thr Leu
                325
```

<210> 27
<211> 201
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> NC R3 (NKp30)

<400> 27

```
Met Ala Trp Met Leu Leu Leu Ile Leu Ile Met Val His Pro Gly Ser
1               5                  10                  15


Cys Ala Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly
            20                  25                  30


Ser Ser Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu
        35                  40                  45


Ala Ile Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys
    50                  55                  60


Glu Val Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu
65                  70                  75                  80


Ala Ser Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg
                85                  90                  95


Asp Val Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val
            100                 105                 110


Leu Gly Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu
        115                 120                 125


Lys Glu His Pro Gln Leu Gly Ala Gly Thr Val Leu Leu Leu Arg Ala
    130                 135                 140


Gly Phe Tyr Ala Val Ser Phe Leu Ser Val Ala Val Gly Ser Thr Val
145                 150                 155                 160


Tyr Tyr Gln Gly Lys Cys Leu Thr Trp Lys Gly Pro Arg Arg Gln Leu
                165                 170                 175
```

```
Pro Ala Val Val Pro Ala Pro Leu Pro Pro Pro Cys Gly Ser Ser Ala
            180                 185                 190


His Leu Leu Pro Pro Val Pro Gly Gly
        195                 200


<210>  28
<211>  208
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD80(B7-1) ECD

<400>  28

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

```
Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  29
<211>  224
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD86(B7-2) ECD

<400>  29

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1               5                   10                  15


Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20                  25                  30


Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45
```

```
Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110

Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125

Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro Lys
    130                 135                 140

Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr Asp
145                 150                 155                 160

Gly Val Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp Val
                165                 170                 175

Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met Thr
            180                 185                 190

Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg Leu Leu Ser Ser Pro
        195                 200                 205

Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro Pro Pro Asp His Ile Pro
    210                 215                 220
```

<210> 30
<211> 220

<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD274 (PD-L1, B7-H1) ECD

<400> 30

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  31
<211>  201
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  PDCD1LG2(PD-L2, CD273) ECD

<400>  31

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

```
Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  32
<211>  238
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  ICOSLG(B7RP1, CD275, ICOSL, B7-H2) ECD

<400>  32

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  33
<211>  438
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD276(B7-H3) ECD

<400>  33

Leu Glu Val Gln Val Pro Glu Asp Pro Val Val Ala Leu Val Gly Thr
1               5                   10                  15


Asp Ala Thr Leu Cys Cys Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu
            20                  25                  30


Ala Gln Leu Asn Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val
        35                  40                  45


His Ser Phe Ala Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg
    50                  55                  60


Thr Ala Leu Phe Pro Asp Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg
65                  70                  75                  80


Leu Gln Arg Val Arg Val Ala Asp Glu Gly Ser Phe Thr Cys Phe Val
                85                  90                  95


Ser Ile Arg Asp Phe Gly Ser Ala Ala Val Ser Leu Gln Val Ala Ala
            100                 105                 110
```

```
Pro Tyr Ser Lys Pro Ser Met Thr Leu Glu Pro Asn Lys Asp Leu Arg
        115                 120                 125

Pro Gly Asp Thr Val Thr Ile Thr Cys Ser Ser Tyr Gln Gly Tyr Pro
    130                 135                 140

Glu Ala Glu Val Phe Trp Gln Asp Gly Gln Gly Val Pro Leu Thr Gly
145                 150                 155                 160

Asn Val Thr Thr Ser Gln Met Ala Asn Glu Gln Gly Leu Phe Asp Val
                165                 170                 175

His Ser Ile Leu Arg Val Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys
            180                 185                 190

Leu Val Arg Asn Pro Val Leu Gln Gln Asp Ala His Ser Ser Val Thr
        195                 200                 205

Ile Thr Pro Gln Arg Ser Pro Thr Gly Ala Val Glu Val Gln Val Pro
    210                 215                 220

Glu Asp Pro Val Val Ala Leu Val Gly Thr Asp Ala Thr Leu Arg Cys
225                 230                 235                 240

Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn Leu Ile
                245                 250                 255

Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Thr Glu Gly
            260                 265                 270

Arg Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe Pro Asp
        275                 280                 285

Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val Arg Val
    290                 295                 300
```

```
Ala Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp Phe Gly
305                 310                 315                 320


Ser Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys Pro Ser
                325                 330                 335


Met Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr Val Thr
            340                 345                 350


Ile Thr Cys Ser Ser Tyr Arg Gly Tyr Pro Glu Ala Glu Val Phe Trp
        355                 360                 365


Gln Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr Ser Gln
    370                 375                 380


Met Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Val Leu Arg Val
385                 390                 395                 400


Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn Pro Val
                405                 410                 415


Leu Gln Gln Asp Ala His Gly Ser Val Thr Ile Thr Gly Gln Pro Met
            420                 425                 430


Thr Phe Pro Pro Glu Ala
        435


<210>  34
<211>  235
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  VTCN1(B7-H4) ECD
```

<400> 34

```
Leu Ile Ile Gly Phe Gly Ile Ser Gly Arg His Ser Ile Thr Val Thr
1               5                  10                  15

Thr Val Ala Ser Ala Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys
            20                  25                  30

Thr Phe Glu Pro Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu
        35                  40                  45

Lys Glu Gly Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp
    50                  55                  60

Glu Leu Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe
65                  70                  75                  80

Ala Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
                85                  90                  95

Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser Lys
            100                 105                 110

Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe Ser Met
        115                 120                 125

Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr Leu Arg Cys
    130                 135                 140

Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val Trp Ala Ser Gln
145                 150                 155                 160

Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser Asn Thr Ser Phe Glu
                165                 170                 175

Leu Asn Ser Glu Asn Val Thr Met Lys Val Val Ser Val Leu Tyr Asn
            180                 185                 190
```

```
Val Thr Ile Asn Asn Thr Tyr Ser Cys Met Ile Glu Asn Asp Ile Ala
        195                 200                 205


Lys Ala Thr Gly Asp Ile Lys Val Thr Glu Ser Glu Ile Lys Arg Arg
    210                 215                 220


Ser His Leu Gln Leu Leu Asn Ser Lys Ala Ser
225                 230                 235


<210>  35
<211>  134
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD28 ECD

<400>  35

Asn Lys Ile Leu Val Lys Gln Ser Pro Met Leu Val Ala Tyr Asp Asn
1               5                   10                  15


Ala Val Asn Leu Ser Cys Lys Tyr Ser Tyr Asn Leu Phe Ser Arg Glu
            20                  25                  30


Phe Arg Ala Ser Leu His Lys Gly Leu Asp Ser Ala Val Glu Val Cys
        35                  40                  45


Val Val Tyr Gly Asn Tyr Ser Gln Gln Leu Gln Val Tyr Ser Lys Thr
    50                  55                  60


Gly Phe Asn Cys Asp Gly Lys Leu Gly Asn Glu Ser Val Thr Phe Tyr
65                  70                  75                  80


Leu Gln Asn Leu Tyr Val Asn Gln Thr Asp Ile Tyr Phe Cys Lys Ile
                85                  90                  95
```

```
Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Lys Ser Asn Gly
            100                 105                 110


Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro Leu Phe
        115                 120                 125


Pro Gly Pro Ser Lys Pro
    130


<210>  36
<211>  126
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CTLA4 ECD

<400>  36

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

```
Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  37
<211>  150
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  PDCD1(PD-1) ECD

<400>  37

Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro Trp Asn Pro Pro Thr
1               5                   10                  15


Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly Asp Asn Ala Thr Phe
            20                  25                  30


Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe Val Leu Asn Trp Tyr
        35                  40                  45


Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu Ala Ala Phe Pro Glu
    50                  55                  60


Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe Arg Val Thr Gln Leu
65                  70                  75                  80


Pro Asn Gly Arg Asp Phe His Met Ser Val Val Arg Ala Arg Arg Asn
                85                  90                  95


Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser Leu Ala Pro Lys Ala
            100                 105                 110
```

```
Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg Val Thr Glu Arg Arg
        115                 120                 125


Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser Pro Arg Pro Ala Gly
    130                 135                 140


Gln Phe Gln Thr Leu Val
145                 150


<210>  38
<211>  120
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  ICOS ECD

<400>  38

Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile Phe His Asn Gly
1               5                   10                  15


Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val Gln Gln Phe Lys
            20                  25                  30


Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp Leu Thr Lys Thr
        35                  40                  45


Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu Lys Phe Cys His
    50                  55                  60


Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu Tyr Asn Leu Asp
65                  70                  75                  80


His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser Ile Phe Asp Pro
                85                  90                  95
```

```
Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu His Ile Tyr Glu
            100                 105                 110


Ser Gln Leu Cys Cys Gln Leu Lys
        115                 120


<210>  39
<211>  127
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  BTLA(CD272) ECD

<400>  39

Lys Glu Ser Cys Asp Val Gln Leu Tyr Ile Lys Arg Gln Ser Glu His
1               5                   10                  15


Ser Ile Leu Ala Gly Asp Pro Phe Glu Leu Glu Cys Pro Val Lys Tyr
            20                  25                  30


Cys Ala Asn Arg Pro His Val Thr Trp Cys Lys Leu Asn Gly Thr Thr
        35                  40                  45


Cys Val Lys Leu Glu Asp Arg Gln Thr Ser Trp Lys Glu Glu Lys Asn
    50                  55                  60


Ile Ser Phe Phe Ile Leu His Phe Glu Pro Val Leu Pro Asn Asp Asn
65                  70                  75                  80


Gly Ser Tyr Arg Cys Ser Ala Asn Phe Gln Ser Asn Leu Ile Glu Ser
                85                  90                  95


His Ser Thr Thr Leu Tyr Val Thr Asp Val Lys Ser Ala Ser Glu Arg
            100                 105                 110
```

```
Pro Ser Lys Asp Glu Met Ala Ser Arg Pro Trp Leu Leu Tyr Arg
        115                 120                 125


<210>  40
<211>  371
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD4 ECD

<400>  40

Lys Lys Val Val Leu Gly Lys Lys Gly Asp Thr Val Glu Leu Thr Cys
1               5                   10                  15


Thr Ala Ser Gln Lys Lys Ser Ile Gln Phe His Trp Lys Asn Ser Asn
            20                  25                  30


Gln Ile Lys Ile Leu Gly Asn Gln Gly Ser Phe Leu Thr Lys Gly Pro
        35                  40                  45


Ser Lys Leu Asn Asp Arg Ala Asp Ser Arg Arg Ser Leu Trp Asp Gln
    50                  55                  60


Gly Asn Phe Pro Leu Ile Ile Lys Asn Leu Lys Ile Glu Asp Ser Asp
65                  70                  75                  80


Thr Tyr Ile Cys Glu Val Glu Asp Gln Lys Glu Glu Val Gln Leu Leu
                85                  90                  95


Val Phe Gly Leu Thr Ala Asn Ser Asp Thr His Leu Leu Gln Gly Gln
            100                 105                 110


Ser Leu Thr Leu Thr Leu Glu Ser Pro Pro Gly Ser Ser Pro Ser Val
        115                 120                 125
```

```
Gln Cys Arg Ser Pro Arg Gly Lys Asn Ile Gln Gly Gly Lys Thr Leu
    130                 135                 140

Ser Val Ser Gln Leu Glu Leu Gln Asp Ser Gly Thr Trp Thr Cys Thr
145                 150                 155                 160

Val Leu Gln Asn Gln Lys Lys Val Glu Phe Lys Ile Asp Ile Val Val
                165                 170                 175

Leu Ala Phe Gln Lys Ala Ser Ser Ile Val Tyr Lys Lys Glu Gly Glu
            180                 185                 190

Gln Val Glu Phe Ser Phe Pro Leu Ala Phe Thr Val Glu Lys Leu Thr
        195                 200                 205

Gly Ser Gly Glu Leu Trp Trp Gln Ala Glu Arg Ala Ser Ser Ser Lys
    210                 215                 220

Ser Trp Ile Thr Phe Asp Leu Lys Asn Lys Glu Val Ser Val Lys Arg
225                 230                 235                 240

Val Thr Gln Asp Pro Lys Leu Gln Met Gly Lys Lys Leu Pro Leu His
                245                 250                 255

Leu Thr Leu Pro Gln Ala Leu Pro Gln Tyr Ala Gly Ser Gly Asn Leu
            260                 265                 270

Thr Leu Ala Leu Glu Ala Lys Thr Gly Lys Leu His Gln Glu Val Asn
        275                 280                 285

Leu Val Val Met Arg Ala Thr Gln Leu Gln Lys Asn Leu Thr Cys Glu
    290                 295                 300

Val Trp Gly Pro Thr Ser Pro Lys Leu Met Leu Ser Leu Lys Leu Glu
305                 310                 315                 320
```

```
Asn Lys Glu Ala Lys Val Ser Lys Arg Glu Lys Ala Val Trp Val Leu
                325                 330                 335


Asn Pro Glu Ala Gly Met Trp Gln Cys Leu Leu Ser Asp Ser Gly Gln
            340                 345                 350


Val Leu Leu Glu Ser Asn Ile Lys Val Leu Pro Thr Trp Ser Thr Pro
        355                 360                 365


Val Gln Pro
    370


<210>  41
<211>  161
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD8A(CD8-alpha) ECD

<400>  41

Ser Gln Phe Arg Val Ser Pro Leu Asp Arg Thr Trp Asn Leu Gly Glu
1               5                   10                  15


Thr Val Glu Leu Lys Cys Gln Val Leu Leu Ser Asn Pro Thr Ser Gly
            20                  25                  30


Cys Ser Trp Leu Phe Gln Pro Arg Gly Ala Ala Ala Ser Pro Thr Phe
        35                  40                  45


Leu Leu Tyr Leu Ser Gln Asn Lys Pro Lys Ala Ala Glu Gly Leu Asp
    50                  55                  60


Thr Gln Arg Phe Ser Gly Lys Arg Leu Gly Asp Thr Phe Val Leu Thr
65                  70                  75                  80
```

```
Leu Ser Asp Phe Arg Arg Glu Asn Glu Gly Tyr Tyr Phe Cys Ser Ala
                85                  90                  95

Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe Val Pro Val Phe Leu
            100                 105                 110

Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
        115                 120                 125

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
    130                 135                 140

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
145                 150                 155                 160

Asp
```

<210> 42
<211> 149
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD8B(CD8-beta) ECD

<400> 42

```
Leu Gln Gln Thr Pro Ala Tyr Ile Lys Val Gln Thr Asn Lys Met Val
1               5                   10                  15

Met Leu Ser Cys Glu Ala Lys Ile Ser Leu Ser Asn Met Arg Ile Tyr
            20                  25                  30

Trp Leu Arg Gln Arg Gln Ala Pro Ser Ser Asp Ser His His Glu Phe
        35                  40                  45
```

```
Leu Ala Leu Trp Asp Ser Ala Lys Gly Thr Ile His Gly Glu Glu Val
    50                  55                  60


Glu Gln Glu Lys Ile Ala Val Phe Arg Asp Ala Ser Arg Phe Ile Leu
65                  70                  75                  80


Asn Leu Thr Ser Val Lys Pro Glu Asp Ser Gly Ile Tyr Phe Cys Met
                85                  90                  95


Ile Val Gly Ser Pro Glu Leu Thr Phe Gly Lys Gly Thr Gln Leu Ser
            100                 105                 110


Val Val Asp Phe Leu Pro Thr Thr Ala Gln Pro Thr Lys Lys Ser Thr
        115                 120                 125


Leu Lys Lys Arg Val Cys Arg Leu Pro Arg Pro Glu Thr Gln Lys Gly
    130                 135                 140


Pro Leu Cys Ser Pro
145


<210>  43
<211>  422
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  LAG3 ECD

<400>  43

Val Pro Val Val Trp Ala Gln Glu Gly Ala Pro Ala Gln Leu Pro Cys
1               5                   10                  15


Ser Pro Thr Ile Pro Leu Gln Asp Leu Ser Leu Leu Arg Arg Ala Gly
            20                  25                  30
```

```
Val Thr Trp Gln His Gln Pro Asp Ser Gly Pro Pro Ala Ala Ala Pro
        35                  40                  45

Gly His Pro Leu Ala Pro Gly Pro His Pro Ala Ala Pro Ser Ser Trp
    50                  55                  60

Gly Pro Arg Pro Arg Arg Tyr Thr Val Leu Ser Val Gly Pro Gly Gly
65                  70                  75                  80

Leu Arg Ser Gly Arg Leu Pro Leu Gln Pro Arg Val Gln Leu Asp Glu
                85                  90                  95

Arg Gly Arg Gln Arg Gly Asp Phe Ser Leu Trp Leu Arg Pro Ala Arg
            100                 105                 110

Arg Ala Asp Ala Gly Glu Tyr Arg Ala Ala Val His Leu Arg Asp Arg
        115                 120                 125

Ala Leu Ser Cys Arg Leu Arg Leu Arg Leu Gly Gln Ala Ser Met Thr
    130                 135                 140

Ala Ser Pro Pro Gly Ser Leu Arg Ala Ser Asp Trp Val Ile Leu Asn
145                 150                 155                 160

Cys Ser Phe Ser Arg Pro Asp Arg Pro Ala Ser Val His Trp Phe Arg
                165                 170                 175

Asn Arg Gly Gln Gly Arg Val Pro Val Arg Glu Ser Pro His His His
            180                 185                 190

Leu Ala Glu Ser Phe Leu Phe Leu Pro Gln Val Ser Pro Met Asp Ser
        195                 200                 205

Gly Pro Trp Gly Cys Ile Leu Thr Tyr Arg Asp Gly Phe Asn Val Ser
    210                 215                 220
```

```
Ile Met Tyr Asn Leu Thr Val Leu Gly Leu Glu Pro Pro Thr Pro Leu
225                 230                 235                 240

Thr Val Tyr Ala Gly Ala Gly Ser Arg Val Gly Leu Pro Cys Arg Leu
                245                 250                 255

Pro Ala Gly Val Gly Thr Arg Ser Phe Leu Thr Ala Lys Trp Thr Pro
            260                 265                 270

Pro Gly Gly Gly Pro Asp Leu Leu Val Thr Gly Asp Asn Gly Asp Phe
        275                 280                 285

Thr Leu Arg Leu Glu Asp Val Ser Gln Ala Gln Ala Gly Thr Tyr Thr
    290                 295                 300

Cys His Ile His Leu Gln Glu Gln Gln Leu Asn Ala Thr Val Thr Leu
305                 310                 315                 320

Ala Ile Ile Thr Val Thr Pro Lys Ser Phe Gly Ser Pro Gly Ser Leu
                325                 330                 335

Gly Lys Leu Leu Cys Glu Val Thr Pro Val Ser Gly Gln Glu Arg Phe
            340                 345                 350

Val Trp Ser Ser Leu Asp Thr Pro Ser Gln Arg Ser Phe Ser Gly Pro
        355                 360                 365

Trp Leu Glu Ala Gln Glu Ala Gln Leu Leu Ser Gln Pro Trp Gln Cys
    370                 375                 380

Gln Leu Tyr Gln Gly Glu Arg Leu Leu Gly Ala Ala Val Tyr Phe Thr
385                 390                 395                 400

Glu Leu Ser Ser Pro Gly Ala Gln Arg Ser Gly Arg Ala Pro Gly Ala
                405                 410                 415
```

Leu Pro Ala Gly His Leu
420

<210> 44
<211> 181
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> HAVCR2(TIM-3) ECD

<400> 44

Ser Glu Val Glu Tyr Arg Ala Glu Val Gly Gln Asn Ala Tyr Leu Pro
1 5 10 15

Cys Phe Tyr Thr Pro Ala Ala Pro Gly Asn Leu Val Pro Val Cys Trp
20 25 30

Gly Lys Gly Ala Cys Pro Val Phe Glu Cys Gly Asn Val Val Leu Arg
35 40 45

Thr Asp Glu Arg Asp Val Asn Tyr Trp Thr Ser Arg Tyr Trp Leu Asn
50 55 60

Gly Asp Phe Arg Lys Gly Asp Val Ser Leu Thr Ile Glu Asn Val Thr
65 70 75 80

Leu Ala Asp Ser Gly Ile Tyr Cys Cys Arg Ile Gln Ile Pro Gly Ile
85 90 95

Met Asn Asp Glu Lys Phe Asn Leu Lys Leu Val Ile Lys Pro Ala Lys
100 105 110

Val Thr Pro Ala Pro Thr Arg Gln Arg Asp Phe Thr Ala Ala Phe Pro
115 120 125

```
Arg Met Leu Thr Thr Arg Gly His Gly Pro Ala Glu Thr Gln Thr Leu
    130                 135                 140

Gly Ser Leu Pro Asp Ile Asn Leu Thr Gln Ile Ser Thr Leu Ala Asn
145                 150                 155                 160

Glu Leu Arg Asp Ser Arg Leu Ala Asn Asp Leu Arg Asp Ser Gly Ala
                165                 170                 175

Thr Ile Arg Ile Gly
            180
```

<210> 45
<211> 394
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CEACAM1 ECD

<400> 45

```
Gln Leu Thr Thr Glu Ser Met Pro Phe Asn Val Ala Glu Gly Lys Glu
1               5                   10                  15

Val Leu Leu Leu Val His Asn Leu Pro Gln Gln Leu Phe Gly Tyr Ser
            20                  25                  30

Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Val Gly Tyr
        35                  40                  45

Ala Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Asn Ser Gly Arg
    50                  55                  60

Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Val Thr Gln
65                  70                  75                  80
```

```
Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp Leu Val
                85                  90                  95

Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Pro Glu Leu Pro Lys
            100                 105                 110

Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys Asp Ala
        115                 120                 125

Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Thr Thr Tyr Leu Trp
    130                 135                 140

Trp Ile Asn Asn Gln Ser Leu Pro Val Ser Pro Arg Leu Gln Leu Ser
145                 150                 155                 160

Asn Gly Asn Arg Thr Leu Thr Leu Leu Ser Val Thr Arg Asn Asp Thr
                165                 170                 175

Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Val Ser Ala Asn Arg Ser
            180                 185                 190

Asp Pro Val Thr Leu Asn Val Thr Tyr Gly Pro Asp Thr Pro Thr Ile
        195                 200                 205

Ser Pro Ser Asp Thr Tyr Tyr Arg Pro Gly Ala Asn Leu Ser Leu Ser
    210                 215                 220

Cys Tyr Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Leu Ile Asn
225                 230                 235                 240

Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn Ile Thr
                245                 250                 255

Val Asn Asn Ser Gly Ser Tyr Thr Cys His Ala Asn Asn Ser Val Thr
            260                 265                 270
```

```
Gly Cys Asn Arg Thr Thr Val Lys Thr Ile Ile Val Thr Glu Leu Ser
        275                 280                 285


Pro Val Val Ala Lys Pro Gln Ile Lys Ala Ser Lys Thr Thr Val Thr
    290                 295                 300


Gly Asp Lys Asp Ser Val Asn Leu Thr Cys Ser Thr Asn Asp Thr Gly
305                 310                 315                 320


Ile Ser Ile Arg Trp Phe Phe Lys Asn Gln Ser Leu Pro Ser Ser Glu
                325                 330                 335


Arg Met Lys Leu Ser Gln Gly Asn Thr Thr Leu Ser Ile Asn Pro Val
            340                 345                 350


Lys Arg Glu Asp Ala Gly Thr Tyr Trp Cys Glu Val Phe Asn Pro Ile
        355                 360                 365


Ser Lys Asn Gln Ser Asp Pro Ile Met Leu Asn Val Asn Tyr Asn Ala
    370                 375                 380


Leu Pro Gln Glu Asn Gly Leu Ser Pro Gly
385                 390


<210>  46
<211>  120
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  TIGIT ECD

<400>  46

Met Met Thr Gly Thr Ile Glu Thr Thr Gly Asn Ile Ser Ala Glu Lys
1               5                   10                  15
```

Gly Gly Ser Ile Ile Leu Gln Cys His Leu Ser Ser Thr Thr Ala Gln
20 25 30

Val Thr Gln Val Asn Trp Glu Gln Gln Asp Gln Leu Leu Ala Ile Cys
35 40 45

Asn Ala Asp Leu Gly Trp His Ile Ser Pro Ser Phe Lys Asp Arg Val
50 55 60

Ala Pro Gly Pro Gly Leu Gly Leu Thr Leu Gln Ser Leu Thr Val Asn
65 70 75 80

Asp Thr Gly Glu Tyr Phe Cys Ile Tyr His Thr Tyr Pro Asp Gly Thr
85 90 95

Tyr Thr Gly Arg Ile Phe Leu Glu Val Leu Glu Ser Ser Val Ala Glu
100 105 110

His Gly Ala Arg Phe Gln Ile Pro
115 120

<210> 47
<211> 323
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> PVR(CD155) ECD

<400> 47

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  48
<211>  329
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  PVRL2(CD112) ECD

<400>  48

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  49
<211>  236
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD226 ECD

<400>  49

Glu Glu Val Leu Trp His Thr Ser Val Pro Phe Ala Glu Asn Met Ser
1               5                   10                  15


Leu Glu Cys Val Tyr Pro Ser Met Gly Ile Leu Thr Gln Val Glu Trp
            20                  25                  30
```

```
Phe Lys Ile Gly Thr Gln Gln Asp Ser Ile Ala Ile Phe Ser Pro Thr
        35                  40                  45

His Gly Met Val Ile Arg Lys Pro Tyr Ala Glu Arg Val Tyr Phe Leu
    50                  55                  60

Asn Ser Thr Met Ala Ser Asn Asn Met Thr Leu Phe Phe Arg Asn Ala
65                  70                  75                  80

Ser Glu Asp Asp Val Gly Tyr Tyr Ser Cys Ser Leu Tyr Thr Tyr Pro
                85                  90                  95

Gln Gly Thr Trp Gln Lys Val Ile Gln Val Val Gln Ser Asp Ser Phe
            100                 105                 110

Glu Ala Ala Val Pro Ser Asn Ser His Ile Val Ser Glu Pro Gly Lys
        115                 120                 125

Asn Val Thr Leu Thr Cys Gln Pro Gln Met Thr Trp Pro Val Gln Ala
    130                 135                 140

Val Arg Trp Glu Lys Ile Gln Pro Arg Gln Ile Asp Leu Leu Thr Tyr
145                 150                 155                 160

Cys Asn Leu Val His Gly Arg Asn Phe Thr Ser Lys Phe Pro Arg Gln
                165                 170                 175

Ile Val Ser Asn Cys Ser His Gly Arg Trp Ser Val Ile Val Ile Pro
            180                 185                 190

Asp Val Thr Val Ser Asp Ser Gly Leu Tyr Arg Cys Tyr Leu Gln Ala
        195                 200                 205

Ser Ala Gly Glu Asn Glu Thr Phe Val Met Arg Leu Thr Val Ala Glu
    210                 215                 220
```

```
Gly Lys Thr Asp Asn Gln Tyr Thr Leu Phe Val Ala
225                 230                 235


<210>  50
<211>  185
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD2 ECD

<400>  50

Lys Glu Ile Thr Asn Ala Leu Glu Thr Trp Gly Ala Leu Gly Gln Asp
1               5                   10                  15


Ile Asn Leu Asp Ile Pro Ser Phe Gln Met Ser Asp Asp Ile Asp Asp
            20                  25                  30


Ile Lys Trp Glu Lys Thr Ser Asp Lys Lys Lys Ile Ala Gln Phe Arg
        35                  40                  45


Lys Glu Lys Glu Thr Phe Lys Glu Lys Asp Thr Tyr Lys Leu Phe Lys
    50                  55                  60


Asn Gly Thr Leu Lys Ile Lys His Leu Lys Thr Asp Asp Gln Asp Ile
65                  70                  75                  80


Tyr Lys Val Ser Ile Tyr Asp Thr Lys Gly Lys Asn Val Leu Glu Lys
                85                  90                  95


Ile Phe Asp Leu Lys Ile Gln Glu Arg Val Ser Lys Pro Lys Ile Ser
            100                 105                 110


Trp Thr Cys Ile Asn Thr Thr Leu Thr Cys Glu Val Met Asn Gly Thr
        115                 120                 125
```

```
Asp Pro Glu Leu Asn Leu Tyr Gln Asp Gly Lys His Leu Lys Leu Ser
    130                 135                 140


Gln Arg Val Ile Thr His Lys Trp Thr Thr Ser Leu Ser Ala Lys Phe
145                 150                 155                 160


Lys Cys Thr Ala Gly Asn Lys Val Ser Lys Glu Ser Ser Val Glu Pro
                165                 170                 175


Val Ser Cys Pro Glu Lys Gly Leu Asp
            180                 185


<210>  51
<211>  133
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD160 ECD

<400>  51

Ile Asn Ile Thr Ser Ser Ala Ser Gln Glu Gly Thr Arg Leu Asn Leu
1               5                   10                  15


Ile Cys Thr Val Trp His Lys Lys Glu Glu Ala Glu Gly Phe Val Val
            20                  25                  30


Phe Leu Cys Lys Asp Arg Ser Gly Asp Cys Ser Pro Glu Thr Ser Leu
        35                  40                  45


Lys Gln Leu Arg Leu Lys Arg Asp Pro Gly Ile Asp Gly Val Gly Glu
    50                  55                  60


Ile Ser Ser Gln Leu Met Phe Thr Ile Ser Gln Val Thr Pro Leu His
65                  70                  75                  80
```

```
Ser Gly Thr Tyr Gln Cys Cys Ala Arg Ser Gln Lys Ser Gly Ile Arg
                85                  90                  95


Leu Gln Gly His Phe Phe Ser Ile Leu Phe Thr Glu Thr Gly Asn Tyr
            100                 105                 110


Thr Val Thr Gly Leu Lys Gln Arg Gln His Leu Glu Phe Ser His Asn
        115                 120                 125


Glu Gly Thr Leu Ser
    130


<210>  52
<211>  202
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD200 ECD

<400>  52

Gln Val Gln Val Val Thr Gln Asp Glu Arg Glu Gln Leu Tyr Thr Pro
1               5                   10                  15


Ala Ser Leu Lys Cys Ser Leu Gln Asn Ala Gln Glu Ala Leu Ile Val
            20                  25                  30


Thr Trp Gln Lys Lys Lys Ala Val Ser Pro Glu Asn Met Val Thr Phe
        35                  40                  45


Ser Glu Asn His Gly Val Val Ile Gln Pro Ala Tyr Lys Asp Lys Ile
    50                  55                  60


Asn Ile Thr Gln Leu Gly Leu Gln Asn Ser Thr Ile Thr Phe Trp Asn
65                  70                  75                  80
```

```
Ile Thr Leu Glu Asp Glu Gly Cys Tyr Met Cys Leu Phe Asn Thr Phe
                85                  90                  95

Gly Phe Gly Lys Ile Ser Gly Thr Ala Cys Leu Thr Val Tyr Val Gln
            100                 105                 110

Pro Ile Val Ser Leu His Tyr Lys Phe Ser Glu Asp His Leu Asn Ile
        115                 120                 125

Thr Cys Ser Ala Thr Ala Arg Pro Ala Pro Met Val Phe Trp Lys Val
    130                 135                 140

Pro Arg Ser Gly Ile Glu Asn Ser Thr Val Thr Leu Ser His Pro Asn
145                 150                 155                 160

Gly Thr Thr Ser Val Thr Ser Ile Leu His Ile Lys Asp Pro Lys Asn
                165                 170                 175

Gln Val Gly Lys Glu Val Ile Cys Gln Val Leu His Leu Gly Thr Val
            180                 185                 190

Thr Asp Phe Lys Gln Thr Val Asn Lys Gly
        195                 200


<210>  53
<211>  215
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD200R1(CD200R) ECD

<400>  53

Met Asp Glu Lys Gln Ile Thr Gln Asn Tyr Ser Lys Val Leu Ala Glu
1               5                   10                  15
```

```
Val Asn Thr Ser Trp Pro Val Lys Met Ala Thr Asn Ala Val Leu Cys
            20                  25                  30

Cys Pro Pro Ile Ala Leu Arg Asn Leu Ile Ile Ile Thr Trp Glu Ile
        35                  40                  45

Ile Leu Arg Gly Gln Pro Ser Cys Thr Lys Ala Tyr Arg Lys Glu Thr
    50                  55                  60

Asn Glu Thr Lys Glu Thr Asn Cys Thr Asp Glu Arg Ile Thr Trp Val
65                  70                  75                  80

Ser Arg Pro Asp Gln Asn Ser Asp Leu Gln Ile Arg Pro Val Ala Ile
                85                  90                  95

Thr His Asp Gly Tyr Tyr Arg Cys Ile Met Val Thr Pro Asp Gly Asn
            100                 105                 110

Phe His Arg Gly Tyr His Leu Gln Val Leu Val Thr Pro Glu Val Thr
        115                 120                 125

Leu Phe Gln Asn Arg Asn Arg Thr Ala Val Cys Lys Ala Val Ala Gly
    130                 135                 140

Lys Pro Ala Ala Gln Ile Ser Trp Ile Pro Glu Gly Asp Cys Ala Thr
145                 150                 155                 160

Lys Gln Glu Tyr Trp Ser Asn Gly Thr Val Thr Val Lys Ser Thr Cys
                165                 170                 175

His Trp Glu Val His Asn Val Ser Thr Val Thr Cys His Val Ser His
            180                 185                 190

Leu Thr Gly Asn Lys Ser Leu Tyr Ile Glu Leu Leu Pro Val Pro Gly
        195                 200                 205
```

```
Ala Lys Lys Ser Ala Lys Leu
    210                 215


<210>  54
<211>  117
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  NC R3 (NKp30) ECD

<400>  54

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1               5                   10                  15


Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
            20                  25                  30


Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35                  40                  45


Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Ser
    50                  55                  60


Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65                  70                  75                  80


Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85                  90                  95


Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
            100                 105                 110


His Pro Gln Leu Gly
        115
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<210> 55
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV

<400> 55

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 56
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v1

<400> 56

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Asn Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val Asn Gly Glu Glu Asp Leu Glu Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190
```

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 57
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v2

<400> 57

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Thr Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  58
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v3

<400>  58

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Glu Asn Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
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<210> 59
<211> 220

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v4

<400> 59

```
Phe Thr Val Thr Val Ser Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Thr Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  60
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v5

<400>  60

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  61
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v6

<400>  61

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 62
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v7

<400> 62

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  63
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v8

<400>  63

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  64
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v9
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<400> 64

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Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190
```

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 65
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v10

<400> 65

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  66
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v11

<400>  66

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 67
<211> 220

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v12

<400> 67

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asp Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Gly Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  68
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v13

<400>  68

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Ser Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  69
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v14

<400>  69

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 70
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v15

<400> 70

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  71
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v16

<400>  71

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  72
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v17
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<400> 72

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

```
Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  73
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v18

<400>  73

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  74
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v19

<400>  74

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Glu Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 75
<211> 220

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v20

<400> 75

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Ile Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val Arg Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 76
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v21

<400> 76

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Glu Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln Arg Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  77
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v22

<400>  77

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 78
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v23

<400> 78

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Gly
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Glu Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  79
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v24

<400>  79

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Ile Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  80
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v25
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<400> 80

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190
```

```
Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  81
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v26

<400>  81

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Val Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  82
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v27

<400>  82

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 83
<211> 220

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v28

<400> 83

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Gly Met Glu Val Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 84
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v29

<400> 84

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Ser Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  85
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v30

<400>  85

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 86
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v31

<400> 86

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  87
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v32

<400>  87

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  88
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v33
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<400> 88

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

```
Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  89
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v34

<400>  89

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  90
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v35

<400>  90

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45
```

```
Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 91
<211> 220

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v36

<400> 91

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Met Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 92
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v37

<400> 92

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  93
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v38

<400>  93

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Pro Pro Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 94
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v39

<400> 94

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  95
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v40

<400>  95

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Arg Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  96
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v41
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<400> 96

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

```
Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  97
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v42

<400>  97

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Val Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  98
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v43

<400>  98

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Gly Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 99
<211> 220

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v44

<400> 99

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  100
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v45

<400>  100

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  101
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v46

<400>  101

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 102
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v47

<400> 102

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  103
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v48

<400>  103

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  104
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v49
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<400> 104

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

```
Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  105
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v50

<400>  105

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  106
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v51

<400>  106

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45
```

```
Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 107
<211> 220

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v52

<400> 107

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Ala Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val Tyr Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 108
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v53

<400> 108

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  109
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v54

<400>  109

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 110
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v55

<400> 110

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  111
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v56

<400>  111

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Gly Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  112
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v57
```

<400> 112

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

```
Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  113
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v58

<400>  113

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  114
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v59

<400>  114

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Gly Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Asp Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 115
<211> 221

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v60

<400> 115

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp
        115                 120                 125


Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro
    130                 135                 140


Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly
145                 150                 155                 160
```

```
Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val
                165                 170                 175


Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys
            180                 185                 190


Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val
        195                 200                 205


Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  116
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v61

<400>  116

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

```
Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  117
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v62

<400>  117

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Leu Glu Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 118
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v63

<400> 118

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Ile Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Ile Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Lys Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

```
Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  119
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v64

<400>  119

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  120
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v65
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<400> 120

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

```
Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  121
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v1

<400>  121

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Asn Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln Phe Val Asn Gly Glu
        35                  40                  45


Glu Asp Leu Glu Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 122
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v2

<400> 122

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asp Ile Thr Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 123
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v3

<400> 123

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Lys Glu Asp Glu Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  124
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v4

<400>  124

Ser Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45
```

```
Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Thr Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 125
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v5

<400> 125

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80
```

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 126
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v6

<400> 126

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 127
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v7

<400> 127

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 128
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v8

<400> 128

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

```
Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  129
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v9

<400>  129

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45
```

```
Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 130
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v10

<400> 130

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95
```

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 131
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v11

<400> 131

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 132
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v12

<400> 132

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asp Met Thr Ile Glu
1   5   10   15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20   25   30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
        35   40   45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50   55   60

Leu Lys Gly Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65   70   75   80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85   90   95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105

<210> 133
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v13

<400> 133

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1   5   10   15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Ser Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 134
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v14

<400> 134

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

```
Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  135
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v15

<400>  135

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95
```

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 136
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v16

<400> 136

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 137
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L1 IgV v17

<400> 137

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 138
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v18

<400> 138

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

```
Tyr Trp Glu Lys Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  139
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v19

<400>  139

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60
```

Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Glu
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 140
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v20

<400> 140

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Ile Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Lys Glu Gly Lys Asn Ile Ile Gln Phe Val Arg Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 141
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v21

<400> 141

Pro Lys Asp Leu Tyr Glu Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln Arg Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 142
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v22

<400> 142

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Ala His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 143
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v23

<400> 143

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Gly Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Glu Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 144
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v24

<400> 144

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

```
Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Ile Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  145
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v25

<400>  145

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 146
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v26

<400> 146

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Val
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 147
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v27

<400> 147

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 148
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v28

<400> 148

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Gly Met Glu Val Lys Thr Ile Ile Gln Phe Ala His Gly Glu
35 40 45

```
Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 149
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v29

<400> 149

```
Pro Lys Asp Leu Tyr Val Val Glu Ser Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80
```

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 150
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v30

<400> 150

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 151
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v31

<400> 151

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 152
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v32

<400> 152

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

```
Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 153
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v33

<400> 153

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45
```

```
Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 154
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v34

<400> 154

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95
```

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 155
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v35

<400> 155

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 156
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v36

<400> 156

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Met Lys Val
            100                 105
```

<210> 157
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v37

<400> 157

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15
```

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 158
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v38

<400> 158

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

```
Leu Lys Asp Gln Pro Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  159
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v39

<400>  159

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95
```

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 160
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v40

<400> 160

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Arg Arg Ile Thr Val Lys Val
100 105

<210> 161
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L1 IgV v41

<400> 161

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 162
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v42

<400> 162

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
20 25 30

```
Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Val Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  163
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v43

<400>  163

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60
```

Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Gly Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 164
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v44

<400> 164

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 165
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v45

<400> 165

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 166
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v46

<400> 166

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 167
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v47

<400> 167

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

```
Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 168
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v48

<400> 168

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80
```

```
Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  169
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v49

<400>  169

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 170
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v50

<400> 170

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 171
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v51

<400> 171

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                  10                  15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Ala His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 172
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v52

<400> 172

```
Pro Lys Asp Leu Tyr Ala Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                  10                  15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val Tyr Gly Glu
        35                  40                  45
```

```
Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Gly Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 173
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v53

<400> 173

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Gly Lys Thr Ile Ile Gln Phe Ala His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80
```

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 174
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v54

<400> 174

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 175
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v55

<400> 175

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 176
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v56

<400> 176

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

```
Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Gly
        35                  40                  45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  177
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v57

<400>  177

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Asp Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45
```

```
Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 178
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v58

<400> 178

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95
```

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 179
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v59

<400> 179

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Gly Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Asp
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 180
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v60

<400> 180

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 181
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v61

<400> 181

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15
```

Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20   25   30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35   40   45

Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50   55   60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65   70   75   80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85   90   95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105

<210> 182
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v62

<400> 182

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1   5   10   15

Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20   25   30

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Ala His Gly Glu
        35   40   45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50   55   60

```
Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  183
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v63

<400>  183

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Ile Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Ile Ile Ile Gln Phe Ala His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Lys Ile Ser Tyr Gly
                85                  90                  95
```

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 184
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v64

<400> 184

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 185
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L1 IgV v65

<400> 185

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 186
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> VH signal peptide

<400> 186

Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly
1 5 10 15

Val Ser Ala

<210> 187
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG1 Fc

<400> 187

```
Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                  10                  15


Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60


Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80


Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95


Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110


Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125


Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140
```

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145 150 155 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
165 170 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
180 185 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
195 200 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
210 215 220

Ser Leu Ser Leu Ser Pro Gly Lys
225 230

<210> 188
<211> 235
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG2 Fc

<400> 188

Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro
1 5 10 15

Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro
20 25 30

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
35 40 45

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn
50 55 60

```
Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
65                  70                  75                  80

Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val
                85                  90                  95

Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
            100                 105                 110

Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys
        115                 120                 125

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
    130                 135                 140

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
145                 150                 155                 160

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
                165                 170                 175

Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe
            180                 185                 190

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
        195                 200                 205

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
    210                 215                 220

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
225                 230                 235
```

<210> 189
<211> 254

<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD80(B7-1)

<400> 189

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly Ile Phe
    210                 215                 220


Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg Glu Arg
225                 230                 235                 240


Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
                245                 250


<210>  190
<211>  306
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD86(B7-2)

<400>  190

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1               5                   10                  15


Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20                  25                  30


Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45
```

```
Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110

Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125

Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro Lys
    130                 135                 140

Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr Asp
145                 150                 155                 160

Gly Val Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp Val
                165                 170                 175

Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met Thr
            180                 185                 190

Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg Leu Leu Ser Ser Pro
        195                 200                 205

Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro Pro Pro Asp His Ile Pro
    210                 215                 220

Trp Ile Thr Ala Val Leu Pro Thr Val Ile Ile Cys Val Met Val Phe
225                 230                 235                 240
```

```
Cys Leu Ile Leu Trp Lys Trp Lys Lys Lys Lys Arg Pro Arg Asn Ser
                245                 250                 255


Tyr Lys Cys Gly Thr Asn Thr Met Glu Arg Glu Glu Ser Glu Gln Thr
            260                 265                 270


Lys Lys Arg Glu Lys Ile His Ile Pro Glu Arg Ser Asp Glu Ala Gln
        275                 280                 285


Arg Val Phe Lys Ser Ser Lys Thr Ser Ser Cys Asp Lys Ser Asp Thr
    290                 295                 300


Cys Phe
305


<210>  191
<211>  272
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD274 (PD-L1, B7-H1)

<400>  191

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr His Leu Val
    210                 215                 220

Ile Leu Gly Ala Ile Leu Leu Cys Leu Gly Val Ala Leu Thr Phe Ile
225                 230                 235                 240

Phe Arg Leu Arg Lys Gly Arg Met Met Asp Val Lys Lys Cys Gly Ile
                245                 250                 255
```

```
Gln Asp Thr Asn Ser Lys Lys Gln Ser Asp Thr His Leu Glu Glu Thr
            260                 265                 270


<210>  192
<211>  254
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature PDCD1LG2(PD-L2, CD273)

<400>  192

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125
```

```
Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr Trp Leu Leu His Ile Phe Ile
        195                 200                 205

Pro Phe Cys Ile Ile Ala Phe Ile Phe Ile Ala Thr Val Ile Ala Leu
    210                 215                 220

Arg Lys Gln Leu Cys Gln Lys Leu Tyr Ser Ser Lys Asp Thr Thr Lys
225                 230                 235                 240

Arg Pro Val Thr Thr Thr Lys Arg Glu Val Asn Ser Ala Ile
                245                 250

<210>  193
<211>  284
<212>  PRT
<213>  Homo sapiens

<220>
<221>  MISC_FEATURE
<223>  Mature ICOSLG(B7RP1, CD275, ICOSL, B7-H2)

<400>  193

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr Trp Ser
225                 230                 235                 240

Ile Leu Ala Val Leu Cys Leu Leu Val Val Val Ala Val Ala Ile Gly
                245                 250                 255

Trp Val Cys Arg Asp Arg Cys Leu Gln His Ser Tyr Ala Gly Ala Trp
            260                 265                 270

Ala Val Ser Pro Glu Thr Glu Leu Thr Gly His Val
        275                 280
```

<210> 194
<211> 506
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD276(B7-H3)

<400> 194

```
Leu Glu Val Gln Val Pro Glu Asp Pro Val Val Ala Leu Val Gly Thr
1               5                   10                  15

Asp Ala Thr Leu Cys Cys Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu
            20                  25                  30

Ala Gln Leu Asn Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val
        35                  40                  45

His Ser Phe Ala Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg
    50                  55                  60
```

```
Thr Ala Leu Phe Pro Asp Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg
65                  70                  75                  80

Leu Gln Arg Val Arg Val Ala Asp Glu Gly Ser Phe Thr Cys Phe Val
                85                  90                  95

Ser Ile Arg Asp Phe Gly Ser Ala Ala Val Ser Leu Gln Val Ala Ala
            100                 105                 110

Pro Tyr Ser Lys Pro Ser Met Thr Leu Glu Pro Asn Lys Asp Leu Arg
        115                 120                 125

Pro Gly Asp Thr Val Thr Ile Thr Cys Ser Ser Tyr Gln Gly Tyr Pro
    130                 135                 140

Glu Ala Glu Val Phe Trp Gln Asp Gly Gln Gly Val Pro Leu Thr Gly
145                 150                 155                 160

Asn Val Thr Thr Ser Gln Met Ala Asn Glu Gln Gly Leu Phe Asp Val
                165                 170                 175

His Ser Ile Leu Arg Val Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys
            180                 185                 190

Leu Val Arg Asn Pro Val Leu Gln Gln Asp Ala His Ser Ser Val Thr
        195                 200                 205

Ile Thr Pro Gln Arg Ser Pro Thr Gly Ala Val Glu Val Gln Val Pro
    210                 215                 220

Glu Asp Pro Val Val Ala Leu Val Gly Thr Asp Ala Thr Leu Arg Cys
225                 230                 235                 240

Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn Leu Ile
                245                 250                 255
```

```
Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Thr Glu Gly
            260                 265                 270

Arg Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe Pro Asp
        275                 280                 285

Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val Arg Val
    290                 295                 300

Ala Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp Phe Gly
305                 310                 315                 320

Ser Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys Pro Ser
                325                 330                 335

Met Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr Val Thr
            340                 345                 350

Ile Thr Cys Ser Ser Tyr Arg Gly Tyr Pro Glu Ala Glu Val Phe Trp
        355                 360                 365

Gln Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr Ser Gln
    370                 375                 380

Met Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Val Leu Arg Val
385                 390                 395                 400

Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn Pro Val
                405                 410                 415

Leu Gln Gln Asp Ala His Gly Ser Val Thr Ile Thr Gly Gln Pro Met
            420                 425                 430

Thr Phe Pro Pro Glu Ala Leu Trp Val Thr Val Gly Leu Ser Val Cys
        435                 440                 445
```

```
Leu Ile Ala Leu Leu Val Ala Leu Ala Phe Val Cys Trp Arg Lys Ile
    450                 455                 460

Lys Gln Ser Cys Glu Glu Glu Asn Ala Gly Ala Glu Asp Gln Asp Gly
465                 470                 475                 480

Glu Gly Glu Gly Ser Lys Thr Ala Leu Gln Pro Leu Lys His Ser Asp
                485                 490                 495

Ser Lys Glu Asp Asp Gly Gln Glu Ile Ala
            500                 505
```

<210> 195
<211> 258
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature VTCN1(B7-H4)

<400> 195

```
Leu Ile Ile Gly Phe Gly Ile Ser Gly Arg His Ser Ile Thr Val Thr
1               5                   10                  15

Thr Val Ala Ser Ala Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys
            20                  25                  30

Thr Phe Glu Pro Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu
        35                  40                  45

Lys Glu Gly Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp
    50                  55                  60

Glu Leu Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe
65                  70                  75                  80
```

```
Ala Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
                85                  90                  95

Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser Lys
            100                 105                 110

Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe Ser Met
        115                 120                 125

Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr Leu Arg Cys
    130                 135                 140

Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val Trp Ala Ser Gln
145                 150                 155                 160

Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser Asn Thr Ser Phe Glu
                165                 170                 175

Leu Asn Ser Glu Asn Val Thr Met Lys Val Val Ser Val Leu Tyr Asn
            180                 185                 190

Val Thr Ile Asn Asn Thr Tyr Ser Cys Met Ile Glu Asn Asp Ile Ala
        195                 200                 205

Lys Ala Thr Gly Asp Ile Lys Val Thr Glu Ser Glu Ile Lys Arg Arg
    210                 215                 220

Ser His Leu Gln Leu Leu Asn Ser Lys Ala Ser Leu Cys Val Ser Ser
225                 230                 235                 240

Phe Phe Ala Ile Ser Trp Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met
                245                 250                 255

Leu Lys
```

<210> 196
<211> 202
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD28

<400> 196

Asn Lys Ile Leu Val Lys Gln Ser Pro Met Leu Val Ala Tyr Asp Asn
1   5   10   15

Ala Val Asn Leu Ser Cys Lys Tyr Ser Tyr Asn Leu Phe Ser Arg Glu
            20   25   30

Phe Arg Ala Ser Leu His Lys Gly Leu Asp Ser Ala Val Glu Val Cys
        35   40   45

Val Val Tyr Gly Asn Tyr Ser Gln Gln Leu Gln Val Tyr Ser Lys Thr
    50   55   60

Gly Phe Asn Cys Asp Gly Lys Leu Gly Asn Glu Ser Val Thr Phe Tyr
65   70   75   80

Leu Gln Asn Leu Tyr Val Asn Gln Thr Asp Ile Tyr Phe Cys Lys Ile
                85   90   95

Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Lys Ser Asn Gly
            100   105   110

Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro Leu Phe
        115   120   125

Pro Gly Pro Ser Lys Pro Phe Trp Val Leu Val Val Val Gly Gly Val
    130   135   140

```
Leu Ala Cys Tyr Ser Leu Leu Val Thr Val Ala Phe Ile Ile Phe Trp
145                 150                 155                 160


Val Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met
                165                 170                 175


Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala
            180                 185                 190


Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser
        195                 200


<210>  197
<211>  188
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CTLA4

<400>  197

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

```
Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Phe Leu
        115                 120                 125


Leu Trp Ile Leu Ala Ala Val Ser Ser Gly Leu Phe Phe Tyr Ser Phe
    130                 135                 140


Leu Leu Thr Ala Val Ser Leu Ser Lys Met Leu Lys Lys Arg Ser Pro
145                 150                 155                 160


Leu Thr Thr Gly Val Tyr Val Lys Met Pro Pro Thr Glu Pro Glu Cys
                165                 170                 175


Glu Lys Gln Phe Gln Pro Tyr Phe Ile Pro Ile Asn
            180                 185


<210>  198
<211>  268
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature PDCD1(PD-1)

<400>  198

Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro Trp Asn Pro Pro Thr
1               5                   10                  15


Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly Asp Asn Ala Thr Phe
            20                  25                  30
```

```
Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe Val Leu Asn Trp Tyr
        35                  40                  45

Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu Ala Ala Phe Pro Glu
    50                  55                  60

Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe Arg Val Thr Gln Leu
65                  70                  75                  80

Pro Asn Gly Arg Asp Phe His Met Ser Val Val Arg Ala Arg Arg Asn
                85                  90                  95

Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser Leu Ala Pro Lys Ala
            100                 105                 110

Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg Val Thr Glu Arg Arg
        115                 120                 125

Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser Pro Arg Pro Ala Gly
    130                 135                 140

Gln Phe Gln Thr Leu Val Val Gly Val Val Gly Gly Leu Leu Gly Ser
145                 150                 155                 160

Leu Val Leu Leu Val Trp Val Leu Ala Val Ile Cys Ser Arg Ala Ala
                165                 170                 175

Arg Gly Thr Ile Gly Ala Arg Arg Thr Gly Gln Pro Leu Lys Glu Asp
            180                 185                 190

Pro Ser Ala Val Pro Val Phe Ser Val Asp Tyr Gly Glu Leu Asp Phe
        195                 200                 205

Gln Trp Arg Glu Lys Thr Pro Glu Pro Pro Val Pro Cys Val Pro Glu
    210                 215                 220
```

```
Gln Thr Glu Tyr Ala Thr Ile Val Phe Pro Ser Gly Met Gly Thr Ser
225                 230                 235                 240


Ser Pro Ala Arg Arg Gly Ser Ala Asp Gly Pro Arg Ser Ala Gln Pro
                245                 250                 255


Leu Arg Pro Glu Asp Gly His Cys Ser Trp Pro Leu
            260                 265


<210>  199
<211>  179
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature ICOS

<400>  199

Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile Phe His Asn Gly
1               5                   10                  15


Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val Gln Gln Phe Lys
            20                  25                  30


Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp Leu Thr Lys Thr
        35                  40                  45


Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu Lys Phe Cys His
    50                  55                  60


Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu Tyr Asn Leu Asp
65                  70                  75                  80


His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser Ile Phe Asp Pro
                85                  90                  95
```

```
Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu His Ile Tyr Glu
            100                 105                 110


Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro Ile Gly Cys Ala
        115                 120                 125


Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu Ile Cys Trp Leu
    130                 135                 140


Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro Asn Gly Glu Tyr
145                 150                 155                 160


Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser Arg Leu Thr Asp
                165                 170                 175


Val Thr Leu



<210>  200
<211>  259
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature BTLA(CD272)

<400>  200

Lys Glu Ser Cys Asp Val Gln Leu Tyr Ile Lys Arg Gln Ser Glu His
1               5                   10                  15


Ser Ile Leu Ala Gly Asp Pro Phe Glu Leu Glu Cys Pro Val Lys Tyr
            20                  25                  30


Cys Ala Asn Arg Pro His Val Thr Trp Cys Lys Leu Asn Gly Thr Thr
        35                  40                  45
```

```
Cys Val Lys Leu Glu Asp Arg Gln Thr Ser Trp Lys Glu Glu Lys Asn
    50                  55                  60

Ile Ser Phe Phe Ile Leu His Phe Glu Pro Val Leu Pro Asn Asp Asn
65                  70                  75                  80

Gly Ser Tyr Arg Cys Ser Ala Asn Phe Gln Ser Asn Leu Ile Glu Ser
                85                  90                  95

His Ser Thr Thr Leu Tyr Val Thr Asp Val Lys Ser Ala Ser Glu Arg
            100                 105                 110

Pro Ser Lys Asp Glu Met Ala Ser Arg Pro Trp Leu Leu Tyr Arg Leu
        115                 120                 125

Leu Pro Leu Gly Gly Leu Pro Leu Leu Ile Thr Thr Cys Phe Cys Leu
    130                 135                 140

Phe Cys Cys Leu Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser Asp
145                 150                 155                 160

Thr Ala Gly Arg Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser Glu
                165                 170                 175

Gln Thr Glu Ala Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser Glu
            180                 185                 190

Thr Gly Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln Glu
        195                 200                 205

Gly Ser Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro Gly
    210                 215                 220

Ile Val Tyr Ala Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser Arg
225                 230                 235                 240
```

```
Leu Ala Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile Cys
                245                 250                 255


Val Arg Ser



<210>  201
<211>  433
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD4

<400>  201

Lys Lys Val Val Leu Gly Lys Lys Gly Asp Thr Val Glu Leu Thr Cys
1               5                   10                  15


Thr Ala Ser Gln Lys Lys Ser Ile Gln Phe His Trp Lys Asn Ser Asn
            20                  25                  30


Gln Ile Lys Ile Leu Gly Asn Gln Gly Ser Phe Leu Thr Lys Gly Pro
        35                  40                  45


Ser Lys Leu Asn Asp Arg Ala Asp Ser Arg Arg Ser Leu Trp Asp Gln
    50                  55                  60


Gly Asn Phe Pro Leu Ile Ile Lys Asn Leu Lys Ile Glu Asp Ser Asp
65                  70                  75                  80


Thr Tyr Ile Cys Glu Val Glu Asp Gln Lys Glu Glu Val Gln Leu Leu
                85                  90                  95


Val Phe Gly Leu Thr Ala Asn Ser Asp Thr His Leu Leu Gln Gly Gln
            100                 105                 110
```

```
Ser Leu Thr Leu Thr Leu Glu Ser Pro Pro Gly Ser Ser Pro Ser Val
        115                 120                 125

Gln Cys Arg Ser Pro Arg Gly Lys Asn Ile Gln Gly Gly Lys Thr Leu
    130                 135                 140

Ser Val Ser Gln Leu Glu Leu Gln Asp Ser Gly Thr Trp Thr Cys Thr
145                 150                 155                 160

Val Leu Gln Asn Gln Lys Lys Val Glu Phe Lys Ile Asp Ile Val Val
                165                 170                 175

Leu Ala Phe Gln Lys Ala Ser Ser Ile Val Tyr Lys Lys Glu Gly Glu
            180                 185                 190

Gln Val Glu Phe Ser Phe Pro Leu Ala Phe Thr Val Glu Lys Leu Thr
        195                 200                 205

Gly Ser Gly Glu Leu Trp Trp Gln Ala Glu Arg Ala Ser Ser Ser Lys
    210                 215                 220

Ser Trp Ile Thr Phe Asp Leu Lys Asn Lys Glu Val Ser Val Lys Arg
225                 230                 235                 240

Val Thr Gln Asp Pro Lys Leu Gln Met Gly Lys Lys Leu Pro Leu His
                245                 250                 255

Leu Thr Leu Pro Gln Ala Leu Pro Gln Tyr Ala Gly Ser Gly Asn Leu
            260                 265                 270

Thr Leu Ala Leu Glu Ala Lys Thr Gly Lys Leu His Gln Glu Val Asn
        275                 280                 285

Leu Val Val Met Arg Ala Thr Gln Leu Gln Lys Asn Leu Thr Cys Glu
    290                 295                 300
```

```
Val Trp Gly Pro Thr Ser Pro Lys Leu Met Leu Ser Leu Lys Leu Glu
305                 310                 315                 320


Asn Lys Glu Ala Lys Val Ser Lys Arg Glu Lys Ala Val Trp Val Leu
                325                 330                 335


Asn Pro Glu Ala Gly Met Trp Gln Cys Leu Leu Ser Asp Ser Gly Gln
            340                 345                 350


Val Leu Leu Glu Ser Asn Ile Lys Val Leu Pro Thr Trp Ser Thr Pro
        355                 360                 365


Val Gln Pro Met Ala Leu Ile Val Leu Gly Gly Val Ala Gly Leu Leu
    370                 375                 380


Leu Phe Ile Gly Leu Gly Ile Phe Phe Cys Val Arg Cys Arg His Arg
385                 390                 395                 400


Arg Arg Gln Ala Glu Arg Met Ser Gln Ile Lys Arg Leu Leu Ser Glu
                405                 410                 415


Lys Lys Thr Cys Gln Cys Pro His Arg Phe Gln Lys Thr Cys Ser Pro
            420                 425                 430


Ile



<210>  202
<211>  214
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD8A(CD8-alpha)
```

<400> 202

```
Ser Gln Phe Arg Val Ser Pro Leu Asp Arg Thr Trp Asn Leu Gly Glu
1               5                  10                  15

Thr Val Glu Leu Lys Cys Gln Val Leu Leu Ser Asn Pro Thr Ser Gly
            20                  25                  30

Cys Ser Trp Leu Phe Gln Pro Arg Gly Ala Ala Ala Ser Pro Thr Phe
        35                  40                  45

Leu Leu Tyr Leu Ser Gln Asn Lys Pro Lys Ala Ala Glu Gly Leu Asp
    50                  55                  60

Thr Gln Arg Phe Ser Gly Lys Arg Leu Gly Asp Thr Phe Val Leu Thr
65                  70                  75                  80

Leu Ser Asp Phe Arg Arg Glu Asn Glu Gly Tyr Tyr Phe Cys Ser Ala
                85                  90                  95

Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe Val Pro Val Phe Leu
            100                 105                 110

Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
        115                 120                 125

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
    130                 135                 140

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
145                 150                 155                 160

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
                165                 170                 175

Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg
            180                 185                 190
```

```
Val Cys Lys Cys Pro Arg Pro Val Val Lys Ser Gly Asp Lys Pro Ser
        195                 200                 205


Leu Ser Ala Arg Tyr Val
    210


<210>  203
<211>  189
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD8B(CD8-beta)

<400>  203

Leu Gln Gln Thr Pro Ala Tyr Ile Lys Val Gln Thr Asn Lys Met Val
1               5                   10                  15


Met Leu Ser Cys Glu Ala Lys Ile Ser Leu Ser Asn Met Arg Ile Tyr
            20                  25                  30


Trp Leu Arg Gln Arg Gln Ala Pro Ser Ser Asp Ser His His Glu Phe
        35                  40                  45


Leu Ala Leu Trp Asp Ser Ala Lys Gly Thr Ile His Gly Glu Glu Val
    50                  55                  60


Glu Gln Glu Lys Ile Ala Val Phe Arg Asp Ala Ser Arg Phe Ile Leu
65                  70                  75                  80


Asn Leu Thr Ser Val Lys Pro Glu Asp Ser Gly Ile Tyr Phe Cys Met
                85                  90                  95


Ile Val Gly Ser Pro Glu Leu Thr Phe Gly Lys Gly Thr Gln Leu Ser
            100                 105                 110
```

```
Val Val Asp Phe Leu Pro Thr Thr Ala Gln Pro Thr Lys Lys Ser Thr
        115                 120                 125


Leu Lys Lys Arg Val Cys Arg Leu Pro Arg Pro Glu Thr Gln Lys Gly
    130                 135                 140


Pro Leu Cys Ser Pro Ile Thr Leu Gly Leu Leu Val Ala Gly Val Leu
145                 150                 155                 160


Val Leu Leu Val Ser Leu Gly Val Ala Ile His Leu Cys Cys Arg Arg
                165                 170                 175


Arg Arg Ala Arg Leu Arg Phe Met Lys Gln Phe Tyr Lys
            180                 185


<210>  204
<211>  497
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature LAG3

<400>  204

Val Pro Val Val Trp Ala Gln Glu Gly Ala Pro Ala Gln Leu Pro Cys
1               5                   10                  15


Ser Pro Thr Ile Pro Leu Gln Asp Leu Ser Leu Leu Arg Arg Ala Gly
            20                  25                  30


Val Thr Trp Gln His Gln Pro Asp Ser Gly Pro Pro Ala Ala Ala Pro
        35                  40                  45


Gly His Pro Leu Ala Pro Gly Pro His Pro Ala Ala Pro Ser Ser Trp
    50                  55                  60
```

```
Gly Pro Arg Pro Arg Arg Tyr Thr Val Leu Ser Val Gly Pro Gly Gly
65                  70                  75                  80

Leu Arg Ser Gly Arg Leu Pro Leu Gln Pro Arg Val Gln Leu Asp Glu
                85                  90                  95

Arg Gly Arg Gln Arg Gly Asp Phe Ser Leu Trp Leu Arg Pro Ala Arg
            100                 105                 110

Arg Ala Asp Ala Gly Glu Tyr Arg Ala Ala Val His Leu Arg Asp Arg
        115                 120                 125

Ala Leu Ser Cys Arg Leu Arg Leu Arg Leu Gly Gln Ala Ser Met Thr
    130                 135                 140

Ala Ser Pro Pro Gly Ser Leu Arg Ala Ser Asp Trp Val Ile Leu Asn
145                 150                 155                 160

Cys Ser Phe Ser Arg Pro Asp Arg Pro Ala Ser Val His Trp Phe Arg
                165                 170                 175

Asn Arg Gly Gln Gly Arg Val Pro Val Arg Glu Ser Pro His His His
            180                 185                 190

Leu Ala Glu Ser Phe Leu Phe Leu Pro Gln Val Ser Pro Met Asp Ser
        195                 200                 205

Gly Pro Trp Gly Cys Ile Leu Thr Tyr Arg Asp Gly Phe Asn Val Ser
    210                 215                 220

Ile Met Tyr Asn Leu Thr Val Leu Gly Leu Glu Pro Pro Thr Pro Leu
225                 230                 235                 240

Thr Val Tyr Ala Gly Ala Gly Ser Arg Val Gly Leu Pro Cys Arg Leu
                245                 250                 255
```

```
Pro Ala Gly Val Gly Thr Arg Ser Phe Leu Thr Ala Lys Trp Thr Pro
            260                 265                 270

Pro Gly Gly Gly Pro Asp Leu Leu Val Thr Gly Asp Asn Gly Asp Phe
        275                 280                 285

Thr Leu Arg Leu Glu Asp Val Ser Gln Ala Gln Ala Gly Thr Tyr Thr
    290                 295                 300

Cys His Ile His Leu Gln Glu Gln Gln Leu Asn Ala Thr Val Thr Leu
305                 310                 315                 320

Ala Ile Ile Thr Val Thr Pro Lys Ser Phe Gly Ser Pro Gly Ser Leu
                325                 330                 335

Gly Lys Leu Leu Cys Glu Val Thr Pro Val Ser Gly Gln Glu Arg Phe
            340                 345                 350

Val Trp Ser Ser Leu Asp Thr Pro Ser Gln Arg Ser Phe Ser Gly Pro
        355                 360                 365

Trp Leu Glu Ala Gln Glu Ala Gln Leu Leu Ser Gln Pro Trp Gln Cys
    370                 375                 380

Gln Leu Tyr Gln Gly Glu Arg Leu Leu Gly Ala Ala Val Tyr Phe Thr
385                 390                 395                 400

Glu Leu Ser Ser Pro Gly Ala Gln Arg Ser Gly Arg Ala Pro Gly Ala
                405                 410                 415

Leu Pro Ala Gly His Leu Leu Leu Phe Leu Ile Leu Gly Val Leu Ser
            420                 425                 430

Leu Leu Leu Leu Val Thr Gly Ala Phe Gly Phe His Leu Trp Arg Arg
        435                 440                 445
```

```
Gln Trp Arg Pro Arg Arg Phe Ser Ala Leu Glu Gln Gly Ile His Pro
    450                 455                 460

Pro Gln Ala Gln Ser Lys Ile Glu Glu Leu Glu Gln Glu Pro Glu Pro
465                 470                 475                 480

Glu Pro Glu Pro Glu Pro Glu Pro Glu Pro Glu Pro Glu Pro Glu Gln
                485                 490                 495

Leu
```

<210> 205
<211> 280
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature HAVCR2(TIM-3)

<400> 205

```
Ser Glu Val Glu Tyr Arg Ala Glu Val Gly Gln Asn Ala Tyr Leu Pro
1               5                   10                  15

Cys Phe Tyr Thr Pro Ala Ala Pro Gly Asn Leu Val Pro Val Cys Trp
            20                  25                  30

Gly Lys Gly Ala Cys Pro Val Phe Glu Cys Gly Asn Val Val Leu Arg
        35                  40                  45

Thr Asp Glu Arg Asp Val Asn Tyr Trp Thr Ser Arg Tyr Trp Leu Asn
    50                  55                  60

Gly Asp Phe Arg Lys Gly Asp Val Ser Leu Thr Ile Glu Asn Val Thr
65                  70                  75                  80
```

```
Leu Ala Asp Ser Gly Ile Tyr Cys Cys Arg Ile Gln Ile Pro Gly Ile
                85                  90                  95

Met Asn Asp Glu Lys Phe Asn Leu Lys Leu Val Ile Lys Pro Ala Lys
            100                 105                 110

Val Thr Pro Ala Pro Thr Arg Gln Arg Asp Phe Thr Ala Ala Phe Pro
        115                 120                 125

Arg Met Leu Thr Thr Arg Gly His Gly Pro Ala Glu Thr Gln Thr Leu
    130                 135                 140

Gly Ser Leu Pro Asp Ile Asn Leu Thr Gln Ile Ser Thr Leu Ala Asn
145                 150                 155                 160

Glu Leu Arg Asp Ser Arg Leu Ala Asn Asp Leu Arg Asp Ser Gly Ala
                165                 170                 175

Thr Ile Arg Ile Gly Ile Tyr Ile Gly Ala Gly Ile Cys Ala Gly Leu
            180                 185                 190

Ala Leu Ala Leu Ile Phe Gly Ala Leu Ile Phe Lys Trp Tyr Ser His
        195                 200                 205

Ser Lys Glu Lys Ile Gln Asn Leu Ser Leu Ile Ser Leu Ala Asn Leu
    210                 215                 220

Pro Pro Ser Gly Leu Ala Asn Ala Val Ala Glu Gly Ile Arg Ser Glu
225                 230                 235                 240

Glu Asn Ile Tyr Thr Ile Glu Glu Asn Val Tyr Glu Val Glu Glu Pro
                245                 250                 255

Asn Glu Tyr Tyr Cys Tyr Val Ser Ser Arg Gln Gln Pro Ser Gln Pro
            260                 265                 270
```

Leu Gly Cys Arg Phe Ala Met Pro
        275   280

<210> 206
<211> 492
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CEACAM1

<400> 206

Gln Leu Thr Thr Glu Ser Met Pro Phe Asn Val Ala Glu Gly Lys Glu
1   5   10   15

Val Leu Leu Leu Val His Asn Leu Pro Gln Gln Leu Phe Gly Tyr Ser
            20   25   30

Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Val Gly Tyr
        35   40   45

Ala Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Asn Ser Gly Arg
    50   55   60

Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Val Thr Gln
65   70   75   80

Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp Leu Val
                85   90   95

Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Pro Glu Leu Pro Lys
            100   105   110

Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys Asp Ala
        115   120   125

```
Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Thr Thr Tyr Leu Trp
    130                 135                 140

Trp Ile Asn Asn Gln Ser Leu Pro Val Ser Pro Arg Leu Gln Leu Ser
145                 150                 155                 160

Asn Gly Asn Arg Thr Leu Thr Leu Leu Ser Val Thr Arg Asn Asp Thr
                165                 170                 175

Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Val Ser Ala Asn Arg Ser
            180                 185                 190

Asp Pro Val Thr Leu Asn Val Thr Tyr Gly Pro Asp Thr Pro Thr Ile
        195                 200                 205

Ser Pro Ser Asp Thr Tyr Tyr Arg Pro Gly Ala Asn Leu Ser Leu Ser
    210                 215                 220

Cys Tyr Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Leu Ile Asn
225                 230                 235                 240

Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn Ile Thr
                245                 250                 255

Val Asn Asn Ser Gly Ser Tyr Thr Cys His Ala Asn Asn Ser Val Thr
            260                 265                 270

Gly Cys Asn Arg Thr Thr Val Lys Thr Ile Ile Val Thr Glu Leu Ser
        275                 280                 285

Pro Val Val Ala Lys Pro Gln Ile Lys Ala Ser Lys Thr Thr Val Thr
    290                 295                 300

Gly Asp Lys Asp Ser Val Asn Leu Thr Cys Ser Thr Asn Asp Thr Gly
305                 310                 315                 320
```

```
Ile Ser Ile Arg Trp Phe Phe Lys Asn Gln Ser Leu Pro Ser Ser Glu
                325                 330                 335

Arg Met Lys Leu Ser Gln Gly Asn Thr Thr Leu Ser Ile Asn Pro Val
            340                 345                 350

Lys Arg Glu Asp Ala Gly Thr Tyr Trp Cys Glu Val Phe Asn Pro Ile
        355                 360                 365

Ser Lys Asn Gln Ser Asp Pro Ile Met Leu Asn Val Asn Tyr Asn Ala
    370                 375                 380

Leu Pro Gln Glu Asn Gly Leu Ser Pro Gly Ala Ile Ala Gly Ile Val
385                 390                 395                 400

Ile Gly Val Val Ala Leu Val Ala Leu Ile Ala Val Ala Leu Ala Cys
                405                 410                 415

Phe Leu His Phe Gly Lys Thr Gly Arg Ala Ser Asp Gln Arg Asp Leu
            420                 425                 430

Thr Glu His Lys Pro Ser Val Ser Asn His Thr Gln Asp His Ser Asn
        435                 440                 445

Asp Pro Pro Asn Lys Met Asn Glu Val Thr Tyr Ser Thr Leu Asn Phe
    450                 455                 460

Glu Ala Gln Gln Pro Thr Gln Pro Thr Ser Ala Ser Pro Ser Leu Thr
465                 470                 475                 480

Ala Thr Glu Ile Ile Tyr Ser Glu Val Lys Lys Gln
                485                 490
```

<210> 207
<211> 222

<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature TIGIT

<400> 207

```
Met Thr Gly Thr Ile Glu Thr Thr Gly Asn Ile Ser Ala Glu Lys Gly
1               5                   10                  15


Gly Ser Ile Ile Leu Gln Cys His Leu Ser Ser Thr Thr Ala Gln Val
            20                  25                  30


Thr Gln Val Asn Trp Glu Gln Gln Asp Gln Leu Leu Ala Ile Cys Asn
        35                  40                  45


Ala Asp Leu Gly Trp His Ile Ser Pro Ser Phe Lys Asp Arg Val Ala
    50                  55                  60


Pro Gly Pro Gly Leu Gly Leu Thr Leu Gln Ser Leu Thr Val Asn Asp
65                  70                  75                  80


Thr Gly Glu Tyr Phe Cys Ile Tyr His Thr Tyr Pro Asp Gly Thr Tyr
                85                  90                  95


Thr Gly Arg Ile Phe Leu Glu Val Leu Glu Ser Ser Val Ala Glu His
            100                 105                 110


Gly Ala Arg Phe Gln Ile Pro Leu Leu Gly Ala Met Ala Ala Thr Leu
        115                 120                 125


Val Val Ile Cys Thr Ala Val Ile Val Val Val Ala Leu Thr Arg Lys
    130                 135                 140


Lys Lys Ala Leu Arg Ile His Ser Val Glu Gly Asp Leu Arg Arg Lys
145                 150                 155                 160
```

```
Ser Ala Gly Gln Glu Glu Trp Ser Pro Ser Ala Pro Ser Pro Pro Gly
                165                 170                 175


Ser Cys Val Gln Ala Glu Ala Ala Pro Ala Gly Leu Cys Gly Glu Gln
            180                 185                 190


Arg Gly Glu Asp Cys Ala Glu Leu His Asp Tyr Phe Asn Val Leu Ser
        195                 200                 205


Tyr Arg Ser Leu Gly Asn Cys Ser Phe Phe Thr Glu Thr Gly
    210                 215                 220


<210>  208
<211>  397
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature PVR(CD155)

<400>  208

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn Ala Ile Ile Phe Leu Val Leu Gly Ile Leu Val Phe Leu
                325                 330                 335


Ile Leu Leu Gly Ile Gly Ile Tyr Phe Tyr Trp Ser Lys Cys Ser Arg
            340                 345                 350


Glu Val Leu Trp His Cys His Leu Cys Pro Ser Ser Thr Glu His Ala
        355                 360                 365


Ser Ala Ser Ala Asn Gly His Val Ser Tyr Ser Ala Val Ser Arg Glu
    370                 375                 380


Asn Ser Ser Ser Gln Asp Pro Gln Thr Glu Gly Thr Arg
385                 390                 395


<210>  209
<211>  507
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature PVRL2(CD112)

<400>  209

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly Ile Ile Gly Gly Ile Ile Ala
                325                 330                 335

Ala Ile Ile Ala Thr Ala Val Ala Ala Thr Gly Ile Leu Ile Cys Arg
            340                 345                 350

Gln Gln Arg Lys Glu Gln Thr Leu Gln Gly Ala Glu Glu Asp Glu Asp
        355                 360                 365

Leu Glu Gly Pro Pro Ser Tyr Lys Pro Pro Thr Pro Lys Ala Lys Leu
    370                 375                 380

Glu Ala Gln Glu Met Pro Ser Gln Leu Phe Thr Leu Gly Ala Ser Glu
385                 390                 395                 400
```

```
His Ser Pro Leu Lys Thr Pro Tyr Phe Asp Ala Gly Ala Ser Cys Thr
                405                 410                 415


Glu Gln Glu Met Pro Arg Tyr His Glu Leu Pro Thr Leu Glu Glu Arg
            420                 425                 430


Ser Gly Pro Leu His Pro Gly Ala Thr Ser Leu Gly Ser Pro Ile Pro
        435                 440                 445


Val Pro Pro Gly Pro Pro Ala Val Glu Asp Val Ser Leu Asp Leu Glu
    450                 455                 460


Asp Glu Glu Gly Glu Glu Glu Glu Glu Tyr Leu Asp Lys Ile Asn Pro
465                 470                 475                 480


Ile Tyr Asp Ala Leu Ser Tyr Ser Ser Pro Ser Asp Ser Tyr Gln Gly
                485                 490                 495


Lys Gly Phe Val Met Ser Arg Ala Met Tyr Val
            500                 505


<210>  210
<211>  318
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD226

<400>  210

Glu Glu Val Leu Trp His Thr Ser Val Pro Phe Ala Glu Asn Met Ser
1               5                   10                  15


Leu Glu Cys Val Tyr Pro Ser Met Gly Ile Leu Thr Gln Val Glu Trp
            20                  25                  30
```

```
Phe Lys Ile Gly Thr Gln Gln Asp Ser Ile Ala Ile Phe Ser Pro Thr
        35                  40                  45

His Gly Met Val Ile Arg Lys Pro Tyr Ala Glu Arg Val Tyr Phe Leu
    50                  55                  60

Asn Ser Thr Met Ala Ser Asn Asn Met Thr Leu Phe Phe Arg Asn Ala
65                  70                  75                  80

Ser Glu Asp Asp Val Gly Tyr Tyr Ser Cys Ser Leu Tyr Thr Tyr Pro
                85                  90                  95

Gln Gly Thr Trp Gln Lys Val Ile Gln Val Val Gln Ser Asp Ser Phe
            100                 105                 110

Glu Ala Ala Val Pro Ser Asn Ser His Ile Val Ser Glu Pro Gly Lys
        115                 120                 125

Asn Val Thr Leu Thr Cys Gln Pro Gln Met Thr Trp Pro Val Gln Ala
    130                 135                 140

Val Arg Trp Glu Lys Ile Gln Pro Arg Gln Ile Asp Leu Leu Thr Tyr
145                 150                 155                 160

Cys Asn Leu Val His Gly Arg Asn Phe Thr Ser Lys Phe Pro Arg Gln
                165                 170                 175

Ile Val Ser Asn Cys Ser His Gly Arg Trp Ser Val Ile Val Ile Pro
            180                 185                 190

Asp Val Thr Val Ser Asp Ser Gly Leu Tyr Arg Cys Tyr Leu Gln Ala
        195                 200                 205

Ser Ala Gly Glu Asn Glu Thr Phe Val Met Arg Leu Thr Val Ala Glu
    210                 215                 220
```

```
Gly Lys Thr Asp Asn Gln Tyr Thr Leu Phe Val Ala Gly Gly Thr Val
225                 230                 235                 240


Leu Leu Leu Leu Phe Val Ile Ser Ile Thr Thr Ile Ile Val Ile Phe
                245                 250                 255


Leu Asn Arg Arg Arg Arg Arg Glu Arg Arg Asp Leu Phe Thr Glu Ser
            260                 265                 270


Trp Asp Thr Gln Lys Ala Pro Asn Asn Tyr Arg Ser Pro Ile Ser Thr
        275                 280                 285


Ser Gln Pro Thr Asn Gln Ser Met Asp Asp Thr Arg Glu Asp Ile Tyr
    290                 295                 300


Val Asn Tyr Pro Thr Phe Ser Arg Arg Pro Lys Thr Arg Val
305                 310                 315


<210>  211
<211>  327
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD2

<400>  211

Lys Glu Ile Thr Asn Ala Leu Glu Thr Trp Gly Ala Leu Gly Gln Asp
1               5                   10                  15


Ile Asn Leu Asp Ile Pro Ser Phe Gln Met Ser Asp Asp Ile Asp Asp
            20                  25                  30


Ile Lys Trp Glu Lys Thr Ser Asp Lys Lys Lys Ile Ala Gln Phe Arg
        35                  40                  45
```

```
Lys Glu Lys Glu Thr Phe Lys Glu Lys Asp Thr Tyr Lys Leu Phe Lys
    50                  55                  60

Asn Gly Thr Leu Lys Ile Lys His Leu Lys Thr Asp Asp Gln Asp Ile
65                  70                  75                  80

Tyr Lys Val Ser Ile Tyr Asp Thr Lys Gly Lys Asn Val Leu Glu Lys
                85                  90                  95

Ile Phe Asp Leu Lys Ile Gln Glu Arg Val Ser Lys Pro Lys Ile Ser
            100                 105                 110

Trp Thr Cys Ile Asn Thr Thr Leu Thr Cys Glu Val Met Asn Gly Thr
        115                 120                 125

Asp Pro Glu Leu Asn Leu Tyr Gln Asp Gly Lys His Leu Lys Leu Ser
    130                 135                 140

Gln Arg Val Ile Thr His Lys Trp Thr Thr Ser Leu Ser Ala Lys Phe
145                 150                 155                 160

Lys Cys Thr Ala Gly Asn Lys Val Ser Lys Glu Ser Ser Val Glu Pro
                165                 170                 175

Val Ser Cys Pro Glu Lys Gly Leu Asp Ile Tyr Leu Ile Ile Gly Ile
            180                 185                 190

Cys Gly Gly Gly Ser Leu Leu Met Val Phe Val Ala Leu Leu Val Phe
        195                 200                 205

Tyr Ile Thr Lys Arg Lys Lys Gln Arg Ser Arg Arg Asn Asp Glu Glu
    210                 215                 220

Leu Glu Thr Arg Ala His Arg Val Ala Thr Glu Glu Arg Gly Arg Lys
225                 230                 235                 240
```

```
Pro His Gln Ile Pro Ala Ser Thr Pro Gln Asn Pro Ala Thr Ser Gln
                245                 250                 255


His Pro Pro Pro Pro Pro Gly His Arg Ser Gln Ala Pro Ser His Arg
            260                 265                 270


Pro Pro Pro Pro Gly His Arg Val Gln His Gln Pro Gln Lys Arg Pro
        275                 280                 285


Pro Ala Pro Ser Gly Thr Gln Val His Gln Gln Lys Gly Pro Pro Leu
    290                 295                 300


Pro Arg Pro Arg Val Gln Pro Lys Pro Pro His Gly Ala Ala Glu Asn
305                 310                 315                 320


Ser Leu Ser Pro Ser Ser Asn
                325


<210>  212
<211>  154
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD160

<400>  212

Ile Asn Ile Thr Ser Ser Ala Ser Gln Glu Gly Thr Arg Leu Asn Leu
1               5                   10                  15


Ile Cys Thr Val Trp His Lys Lys Glu Glu Ala Glu Gly Phe Val Val
            20                  25                  30


Phe Leu Cys Lys Asp Arg Ser Gly Asp Cys Ser Pro Glu Thr Ser Leu
        35                  40                  45
```

```
Lys Gln Leu Arg Leu Lys Arg Asp Pro Gly Ile Asp Gly Val Gly Glu
    50                  55                  60

Ile Ser Ser Gln Leu Met Phe Thr Ile Ser Gln Val Thr Pro Leu His
65                  70                  75                  80

Ser Gly Thr Tyr Gln Cys Cys Ala Arg Ser Gln Lys Ser Gly Ile Arg
                85                  90                  95

Leu Gln Gly His Phe Phe Ser Ile Leu Phe Thr Glu Thr Gly Asn Tyr
            100                 105                 110

Thr Val Thr Gly Leu Lys Gln Arg Gln His Leu Glu Phe Ser His Asn
        115                 120                 125

Glu Gly Thr Leu Ser Ser Gly Phe Leu Gln Glu Lys Val Trp Val Met
    130                 135                 140

Leu Val Thr Ser Leu Val Ala Leu Gln Ala
145                 150


<210>  213
<211>  248
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD200

<400>  213

Gln Val Gln Val Val Thr Gln Asp Glu Arg Glu Gln Leu Tyr Thr Pro
1               5                   10                  15

Ala Ser Leu Lys Cys Ser Leu Gln Asn Ala Gln Glu Ala Leu Ile Val
            20                  25                  30
```

```
Thr Trp Gln Lys Lys Lys Ala Val Ser Pro Glu Asn Met Val Thr Phe
        35                  40                  45

Ser Glu Asn His Gly Val Val Ile Gln Pro Ala Tyr Lys Asp Lys Ile
    50                  55                  60

Asn Ile Thr Gln Leu Gly Leu Gln Asn Ser Thr Ile Thr Phe Trp Asn
65                  70                  75                  80

Ile Thr Leu Glu Asp Glu Gly Cys Tyr Met Cys Leu Phe Asn Thr Phe
                85                  90                  95

Gly Phe Gly Lys Ile Ser Gly Thr Ala Cys Leu Thr Val Tyr Val Gln
            100                 105                 110

Pro Ile Val Ser Leu His Tyr Lys Phe Ser Glu Asp His Leu Asn Ile
        115                 120                 125

Thr Cys Ser Ala Thr Ala Arg Pro Ala Pro Met Val Phe Trp Lys Val
    130                 135                 140

Pro Arg Ser Gly Ile Glu Asn Ser Thr Val Thr Leu Ser His Pro Asn
145                 150                 155                 160

Gly Thr Thr Ser Val Thr Ser Ile Leu His Ile Lys Asp Pro Lys Asn
                165                 170                 175

Gln Val Gly Lys Glu Val Ile Cys Gln Val Leu His Leu Gly Thr Val
            180                 185                 190

Thr Asp Phe Lys Gln Thr Val Asn Lys Gly Tyr Trp Phe Ser Val Pro
        195                 200                 205

Leu Leu Leu Ser Ile Val Ser Leu Val Ile Leu Leu Val Leu Ile Ser
    210                 215                 220
```

```
Ile Leu Leu Tyr Trp Lys Arg His Arg Asn Gln Asp Arg Gly Glu Leu
225                 230                 235                 240


Ser Gln Gly Val Gln Lys Met Thr
                245


<210>  214
<211>  297
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD200R1(CD200R)

<400>  214

Met Asp Glu Lys Gln Ile Thr Gln Asn Tyr Ser Lys Val Leu Ala Glu
1               5                   10                  15


Val Asn Thr Ser Trp Pro Val Lys Met Ala Thr Asn Ala Val Leu Cys
            20                  25                  30


Cys Pro Pro Ile Ala Leu Arg Asn Leu Ile Ile Ile Thr Trp Glu Ile
        35                  40                  45


Ile Leu Arg Gly Gln Pro Ser Cys Thr Lys Ala Tyr Arg Lys Glu Thr
    50                  55                  60


Asn Glu Thr Lys Glu Thr Asn Cys Thr Asp Glu Arg Ile Thr Trp Val
65                  70                  75                  80


Ser Arg Pro Asp Gln Asn Ser Asp Leu Gln Ile Arg Pro Val Ala Ile
                85                  90                  95


Thr His Asp Gly Tyr Tyr Arg Cys Ile Met Val Thr Pro Asp Gly Asn
            100                 105                 110
```

```
Phe His Arg Gly Tyr His Leu Gln Val Leu Val Thr Pro Glu Val Thr
        115                 120                 125

Leu Phe Gln Asn Arg Asn Arg Thr Ala Val Cys Lys Ala Val Ala Gly
    130                 135                 140

Lys Pro Ala Ala Gln Ile Ser Trp Ile Pro Glu Gly Asp Cys Ala Thr
145                 150                 155                 160

Lys Gln Glu Tyr Trp Ser Asn Gly Thr Val Thr Val Lys Ser Thr Cys
                165                 170                 175

His Trp Glu Val His Asn Val Ser Thr Val Thr Cys His Val Ser His
            180                 185                 190

Leu Thr Gly Asn Lys Ser Leu Tyr Ile Glu Leu Leu Pro Val Pro Gly
        195                 200                 205

Ala Lys Lys Ser Ala Lys Leu Tyr Ile Pro Tyr Ile Ile Leu Thr Ile
    210                 215                 220

Ile Ile Leu Thr Ile Val Gly Phe Ile Trp Leu Leu Lys Val Asn Gly
225                 230                 235                 240

Cys Arg Lys Tyr Lys Leu Asn Lys Thr Glu Ser Thr Pro Val Val Glu
                245                 250                 255

Glu Asp Glu Met Gln Pro Tyr Ala Ser Tyr Thr Glu Lys Asn Asn Pro
            260                 265                 270

Leu Tyr Asp Thr Thr Asn Lys Val Lys Ala Ser Glu Ala Leu Gln Ser
        275                 280                 285

Glu Val Asp Thr Asp Leu His Thr Leu
    290                 295
```

<210> 215
<211> 183
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature NC R3 (NKp30)

<400> 215

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1   5   10   15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
            20   25   30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35   40   45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Ser
    50   55   60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65   70   75   80

Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85   90   95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
            100   105   110

His Pro Gln Leu Gly Ala Gly Thr Val Leu Leu Leu Arg Ala Gly Phe
        115   120   125

Tyr Ala Val Ser Phe Leu Ser Val Ala Val Gly Ser Thr Val Tyr Tyr
    130   135   140

```
Gln Gly Lys Cys Leu Thr Trp Lys Gly Pro Arg Arg Gln Leu Pro Ala
145                 150                 155                 160


Val Val Pro Ala Pro Leu Pro Pro Pro Cys Gly Ser Ser Ala His Leu
                165                 170                 175


Leu Pro Pro Val Pro Gly Gly
            180


<210>  216
<211>  414
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  VSIG8

<400>  216

Met Arg Val Gly Gly Ala Phe His Leu Leu Leu Val Cys Leu Ser Pro
1               5                   10                  15


Ala Leu Leu Ser Ala Val Arg Ile Asn Gly Asp Gly Gln Glu Val Leu
            20                  25                  30


Tyr Leu Ala Glu Gly Asp Asn Val Arg Leu Gly Cys Pro Tyr Val Leu
        35                  40                  45


Asp Pro Glu Asp Tyr Gly Pro Asn Gly Leu Asp Ile Glu Trp Met Gln
    50                  55                  60


Val Asn Ser Asp Pro Ala His His Arg Glu Asn Val Phe Leu Ser Tyr
65                  70                  75                  80


Gln Asp Lys Arg Ile Asn His Gly Ser Leu Pro His Leu Gln Gln Arg
                85                  90                  95
```

```
Val Arg Phe Ala Ala Ser Asp Pro Ser Gln Tyr Asp Ala Ser Ile Asn
            100                 105                 110

Leu Met Asn Leu Gln Val Ser Asp Thr Ala Thr Tyr Glu Cys Arg Val
        115                 120                 125

Lys Lys Thr Thr Met Ala Thr Arg Lys Val Ile Val Thr Val Gln Ala
    130                 135                 140

Arg Pro Ala Val Pro Met Cys Trp Thr Glu Gly His Met Thr Tyr Gly
145                 150                 155                 160

Asn Asp Val Val Leu Lys Cys Tyr Ala Ser Gly Gly Ser Gln Pro Leu
                165                 170                 175

Ser Tyr Lys Trp Ala Lys Ile Ser Gly His His Tyr Pro Tyr Arg Ala
            180                 185                 190

Gly Ser Tyr Thr Ser Gln His Ser Tyr His Ser Glu Leu Ser Tyr Gln
        195                 200                 205

Glu Ser Phe His Ser Ser Ile Asn Gln Gly Leu Asn Asn Gly Asp Leu
    210                 215                 220

Val Leu Lys Asp Ile Ser Arg Ala Asp Asp Gly Leu Tyr Gln Cys Thr
225                 230                 235                 240

Val Ala Asn Asn Val Gly Tyr Ser Val Cys Val Val Glu Val Lys Val
                245                 250                 255

Ser Asp Ser Arg Arg Ile Gly Val Ile Ile Gly Ile Val Leu Gly Ser
            260                 265                 270

Leu Leu Ala Leu Gly Cys Leu Ala Val Gly Ile Trp Gly Leu Val Cys
        275                 280                 285
```

```
Cys Cys Cys Gly Gly Ser Gly Ala Gly Gly Ala Arg Gly Ala Phe Gly
    290                 295                 300

Tyr Gly Asn Gly Gly Gly Val Gly Gly Gly Ala Cys Gly Asp Leu Ala
305                 310                 315                 320

Ser Glu Ile Arg Glu Asp Ala Val Ala Pro Gly Cys Lys Ala Ser Gly
                325                 330                 335

Arg Gly Ser Arg Val Thr His Leu Leu Gly Tyr Pro Thr Gln Asn Val
            340                 345                 350

Ser Arg Ser Leu Arg Arg Lys Tyr Ala Pro Pro Pro Cys Gly Gly Pro
        355                 360                 365

Glu Asp Val Ala Leu Ala Pro Cys Thr Ala Ala Ala Ala Cys Glu Ala
    370                 375                 380

Gly Pro Ser Pro Val Tyr Val Lys Val Lys Ser Ala Glu Pro Ala Asp
385                 390                 395                 400

Cys Ala Glu Gly Pro Val Gln Cys Lys Asn Gly Leu Leu Val
                405                 410
```

<210> 217
<211> 393
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature VSIG8

<400> 217

```
Val Arg Ile Asn Gly Asp Gly Gln Glu Val Leu Tyr Leu Ala Glu Gly
1               5                   10                  15
```

```
Asp Asn Val Arg Leu Gly Cys Pro Tyr Val Leu Asp Pro Glu Asp Tyr
            20                  25                  30

Gly Pro Asn Gly Leu Asp Ile Glu Trp Met Gln Val Asn Ser Asp Pro
        35                  40                  45

Ala His His Arg Glu Asn Val Phe Leu Ser Tyr Gln Asp Lys Arg Ile
    50                  55                  60

Asn His Gly Ser Leu Pro His Leu Gln Gln Arg Val Arg Phe Ala Ala
65                  70                  75                  80

Ser Asp Pro Ser Gln Tyr Asp Ala Ser Ile Asn Leu Met Asn Leu Gln
                85                  90                  95

Val Ser Asp Thr Ala Thr Tyr Glu Cys Arg Val Lys Lys Thr Thr Met
            100                 105                 110

Ala Thr Arg Lys Val Ile Val Thr Val Gln Ala Arg Pro Ala Val Pro
        115                 120                 125

Met Cys Trp Thr Glu Gly His Met Thr Tyr Gly Asn Asp Val Val Leu
    130                 135                 140

Lys Cys Tyr Ala Ser Gly Gly Ser Gln Pro Leu Ser Tyr Lys Trp Ala
145                 150                 155                 160

Lys Ile Ser Gly His His Tyr Pro Tyr Arg Ala Gly Ser Tyr Thr Ser
                165                 170                 175

Gln His Ser Tyr His Ser Glu Leu Ser Tyr Gln Glu Ser Phe His Ser
            180                 185                 190

Ser Ile Asn Gln Gly Leu Asn Asn Gly Asp Leu Val Leu Lys Asp Ile
        195                 200                 205
```

```
Ser Arg Ala Asp Asp Gly Leu Tyr Gln Cys Thr Val Ala Asn Asn Val
    210                 215                 220

Gly Tyr Ser Val Cys Val Val Glu Val Lys Val Ser Asp Ser Arg Arg
225                 230                 235                 240

Ile Gly Val Ile Ile Gly Ile Val Leu Gly Ser Leu Leu Ala Leu Gly
                245                 250                 255

Cys Leu Ala Val Gly Ile Trp Gly Leu Val Cys Cys Cys Cys Gly Gly
            260                 265                 270

Ser Gly Ala Gly Gly Ala Arg Gly Ala Phe Gly Tyr Gly Asn Gly Gly
        275                 280                 285

Gly Val Gly Gly Gly Ala Cys Gly Asp Leu Ala Ser Glu Ile Arg Glu
    290                 295                 300

Asp Ala Val Ala Pro Gly Cys Lys Ala Ser Gly Arg Gly Ser Arg Val
305                 310                 315                 320

Thr His Leu Leu Gly Tyr Pro Thr Gln Asn Val Ser Arg Ser Leu Arg
                325                 330                 335

Arg Lys Tyr Ala Pro Pro Pro Cys Gly Gly Pro Glu Asp Val Ala Leu
            340                 345                 350

Ala Pro Cys Thr Ala Ala Ala Ala Cys Glu Ala Gly Pro Ser Pro Val
        355                 360                 365

Tyr Val Lys Val Lys Ser Ala Glu Pro Ala Asp Cys Ala Glu Gly Pro
    370                 375                 380

Val Gln Cys Lys Asn Gly Leu Leu Val
385                 390
```

<210> 218
<211> 242
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> VSIG8 ECD

<400> 218

Val Arg Ile Asn Gly Asp Gly Gln Glu Val Leu Tyr Leu Ala Glu Gly
1   5   10   15

Asp Asn Val Arg Leu Gly Cys Pro Tyr Val Leu Asp Pro Glu Asp Tyr
            20   25   30

Gly Pro Asn Gly Leu Asp Ile Glu Trp Met Gln Val Asn Ser Asp Pro
        35   40   45

Ala His His Arg Glu Asn Val Phe Leu Ser Tyr Gln Asp Lys Arg Ile
    50   55   60

Asn His Gly Ser Leu Pro His Leu Gln Gln Arg Val Arg Phe Ala Ala
65   70   75   80

Ser Asp Pro Ser Gln Tyr Asp Ala Ser Ile Asn Leu Met Asn Leu Gln
                85   90   95

Val Ser Asp Thr Ala Thr Tyr Glu Cys Arg Val Lys Lys Thr Thr Met
            100   105   110

Ala Thr Arg Lys Val Ile Val Thr Val Gln Ala Arg Pro Ala Val Pro
        115   120   125

Met Cys Trp Thr Glu Gly His Met Thr Tyr Gly Asn Asp Val Val Leu
    130   135   140

```
Lys Cys Tyr Ala Ser Gly Gly Ser Gln Pro Leu Ser Tyr Lys Trp Ala
145                 150                 155                 160


Lys Ile Ser Gly His His Tyr Pro Tyr Arg Ala Gly Ser Tyr Thr Ser
                165                 170                 175


Gln His Ser Tyr His Ser Glu Leu Ser Tyr Gln Glu Ser Phe His Ser
            180                 185                 190


Ser Ile Asn Gln Gly Leu Asn Asn Gly Asp Leu Val Leu Lys Asp Ile
        195                 200                 205


Ser Arg Ala Asp Asp Gly Leu Tyr Gln Cys Thr Val Ala Asn Asn Val
    210                 215                 220


Gly Tyr Ser Val Cys Val Val Glu Val Lys Val Ser Asp Ser Arg Arg
225                 230                 235                 240


Ile Gly



<210>  219
<211>  16
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD33 Signal Peptide

<400>  219

Met Pro Leu Leu Leu Leu Leu Pro Leu Leu Trp Ala Gly Ala Leu Ala
1               5                   10                  15


<210>  220
<211>  22
<212>  PRT
<213>  Artificial Sequence
```

<220>
<223> IgGkappa light chain

<400> 220

Met Asp Met Arg Val Leu Ala Gln Leu Leu Gly Leu Leu Leu Leu Cys
1   5   10   15

Phe Pro Gly Ala Arg Cys
            20

<210> 221
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> HSA signal peptide

<400> 221

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1   5   10   15

Tyr Ser

<210> 222
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Ig kappa light chain

<400> 222

Met Asp Met Arg Ala Pro Ala Gly Ile Phe Gly Phe Leu Leu Val Leu
1   5   10   15

Phe Pro Gly Tyr Arg Ser
            20

<210> 223
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Human azurocidin preprotein signal sequence

<400> 223

Met Thr Arg Leu Thr Val Leu Ala Leu Leu Ala Gly Leu Leu Ala Ser
1   5   10   15

Ser Arg Ala

<210> 224
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 224

Met Glu Leu Gly Leu Ser Trp Ile Phe Leu Leu Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys

<210> 225
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 225

Met Glu Leu Gly Leu Arg Trp Val Phe Leu Val Ala Ile Leu Glu Gly
1 5 10 15

Val Gln Cys

<210> 226
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 226

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
1 5 10 15

Val Leu Ser

<210> 227
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 227

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
1 5 10 15

Ala His Ser

<210> 228
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 228

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
1   5   10   15

Val Gln Ser

<210> 229
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 229

Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys

<210> 230
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 230

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Phe Arg Gly
1   5   10   15

Val Gln Cys

<210> 231
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 231

Met Asp Leu Leu His Lys Asn Met Lys His Leu Trp Phe Phe Leu Leu
1   5   10   15

Leu Val Ala Ala Pro Arg Trp Val Leu Ser
            20   25

<210> 232
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG Kappa light chain signal seqeunce

<400> 232

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1   5   10   15

Leu Ser Gly Ala Arg Cys
            20

<210> 233
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG Kappa light chain signal seqeunce

<400> 233

Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala
1   5   10   15

Ala Gln Pro Ala Met Ala
            20

<210> 234
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Gaussia luciferase

<400> 234

Met Gly Val Lys Val Leu Phe Ala Leu Ile Cys Ile Ala Val Ala Glu
1   5   10   15

Ala

<210> 235
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Human albumin

<400> 235

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1   5   10   15

Tyr Ser

<210> 236
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Human chymotrypsinogen

<400> 236

Met Ala Phe Leu Trp Leu Leu Ser Cys Trp Ala Leu Leu Gly Thr Thr
1   5   10   15

Phe Gly

<210> 237
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Human interleukin-2

<400> 237

Met Gln Leu Leu Ser Cys Ile Ala Leu Ile Leu Ala Leu Val
1   5   10

<210> 238
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Human trysinogen-2

<400> 238

Met Asn Leu Leu Leu Ile Leu Thr Phe Val Ala Ala Ala Val Ala
1   5   10   15

<210> 239
<211> 15
<212> PRT
<213> Artificial Sequence

<220>

<223> Linker

<400> 239

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1   5   10   15

<210> 240
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Linker

<400> 240

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1   5   10

<210> 241
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Linker

<400> 241

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Ala Ala
1   5   10

<210> 242
<211> 71
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8-derived hinge and transmembrane domain

<400> 242

Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
1   5   10   15

```
Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Ser Arg Pro Ala
            20                  25                  30


Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Ser Asp Ile
        35                  40                  45


Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
    50                  55                  60


Leu Val Ile Thr Leu Tyr Cys
65                  70


<210>  243
<211>  112
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD3zeta intracellular signaling domain

<400>  243

Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1               5                   10                  15


Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20                  25                  30


Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35                  40                  45


Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50                  55                  60


Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65                  70                  75                  80
```

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 244
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v1

<400> 244

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Asn Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val Asn Gly Glu Glu Asp Leu Glu Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 245
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v2

<400> 245

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Thr Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 246
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v3

<400> 246

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Glu Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 247
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v4

<400> 247

```
Phe Thr Val Thr Val Ser Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Thr Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  248
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v5

<400>  248

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 249
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v6

<400> 249

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 250
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v7

<400> 250

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 251
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v8

<400> 251

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 252
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v9

<400> 252

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 253
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v10

<400> 253

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 254
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v11

<400> 254

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala
```

<210> 255
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v12

<400> 255

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asp Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Gly Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  256
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v13

<400>  256

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Ser Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 257
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v14

<400> 257

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45
```

```
Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 258
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v15

<400> 258

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  259
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v16

<400>  259

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 260
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v17

<400> 260

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 261
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v18

<400> 261

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Thr Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 262
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v19

<400> 262

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Glu Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 263
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v20

<400> 263

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Ile Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val Arg Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  264
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v21

<400>  264

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Glu Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln Arg Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 265
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v22

<400> 265

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45
```

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 266
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v23

<400> 266

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Gly
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Glu Asp Gln Leu Pro Leu Gly Asn Ala Ala
65   70   75   80

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  267
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v24

<400>  267

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95
```

Ile Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 268
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v25

<400> 268

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 269
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v26

<400> 269

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Val Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 270
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v27

<400> 270

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 271
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v28

<400> 271

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Gly Met Glu Val Lys Thr Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 272
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v29

<400> 272

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Ser Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
20 25 30

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 273
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v30

<400> 273

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45
```

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 274
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v31

<400> 274

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 275
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v32

<400> 275

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 276
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v33

<400> 276

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 277
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v34

<400> 277

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35   40   45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 278
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v35

<400> 278

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35   40   45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 279
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v36

<400> 279

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Met Lys Val
            100                 105                 110


Asn Ala



<210>  280
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v37

<400>  280

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 281
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v38

<400> 281

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45
```

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Pro Pro Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 282
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v39

<400> 282

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 283
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v40

<400> 283

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Arg Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 284
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v41

<400> 284

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 285
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v42

<400> 285

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Val Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 286
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v43

<400> 286

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Gly Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 287
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v44

<400> 287

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala
```

<210> 288
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v45

<400> 288

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 289
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v46

<400> 289

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45
```

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 290
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v47

<400> 290

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 291
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v48

<400> 291

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 292
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v49

<400> 292

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 293
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v50

<400> 293

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35   40   45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 294
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v51

<400> 294

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala
```

<210> 295
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v52

<400> 295

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Ala Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val Tyr Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  296
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v53

<400>  296

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30
```

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Thr Ile Ile Gln
        35   40   45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 297
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v54

<400> 297

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 298
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v55

<400> 298

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 299
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v56

<400> 299

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Gly Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 300
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v57

<400> 300

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 301
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v58

<400> 301

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 302
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v59

<400> 302

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Gly Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Asp Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 303
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v60

<400> 303

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala
115

<210> 304
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v61

<400> 304

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 305
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v62

<400> 305

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Leu Glu Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45
```

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 306
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v63

<400> 306

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Ile Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Ile Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Lys Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 307
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v64

<400> 307

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 308
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v65

<400> 308

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 309
<211> 114
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> PD-L1 IgV wildtype

<400> 309

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 310
<211> 116

<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD155 IgV

<400> 310

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 311
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v1 ECD

<400> 311

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Ser
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 312
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v2 ECD

<400> 312

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Pro Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 313
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v3 ECD

<400> 313

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Pro Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  314
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v4 ECD

<400>  314

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Val Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  315
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v5 ECD

<400>  315

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Val Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 316
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v6 ECD

<400> 316

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 317
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v7 ECD

<400> 317

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  318
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v8 ECD

<400>  318

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Pro Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  319
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v9 ECD

<400>  319

Trp Pro Pro Pro Gly Thr Glu Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Cys Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
245 250 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
260 265 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 320
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v10 ECD

<400> 320

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Asp Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  321
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v11 ECD

<400>  321

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Pro Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  322
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v12 ECD

<400>  322

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Leu Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  323
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v14 ECD

<400>  323

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 324
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v15 ECD

<400> 324

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu His Val Glu
85 90 95

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 325
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v16 ECD

<400> 325

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Cys Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 326
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v17 ECD

<400> 326

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Val Glu Pro Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 327
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v18 ECD

<400> 327

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Pro Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 328
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v19 ECD

<400> 328

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu His Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 329
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v20 ECD

<400> 329

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Glu Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Val Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 330
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v21 ECD

<400> 330

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Ala Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 331
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v22 ECD

<400> 331

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Lys Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 332
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v1 IgV

<400> 332

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Ser Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 333
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v2 IgV

<400> 333

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Pro Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 334
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v3 IgV

<400> 334

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Pro Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  335
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v4 IgV

<400>  335

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Val Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 336
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v5 IgV

<400> 336

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Val Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  337
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v6 IgV

<400>  337

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 338
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v7 IgV

<400> 338

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 339
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v8 IgV

<400> 339

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Pro Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 340
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v9 IgV

<400> 340

Pro Gly Thr Glu Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Cys Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 341
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v10 IgV

<400> 341

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Asp Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 342
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v11 IgV

<400> 342

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Pro Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  343
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v12 IgV

<400>  343

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Leu Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 344
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v14 IgV

<400> 344

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  345
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v15 IgV

<400>  345

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Ser Leu Arg Met Ser Gly Leu His Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  346
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v16 IgV

<400>  346

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Cys Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110
```

Asp Ile Trp Leu
        115

<210> 347
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v17 IgV

<400> 347

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Val Glu Pro
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 348
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v18 IgV

<400> 348

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Pro Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 349
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v19 IgV

<400> 349

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu His Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 350
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v20 IgV

<400> 350

Pro Gly Thr Gly Asp Val Val Val Gln Glu Pro Thr Gln Val Ser Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Val Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  351
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v21 IgV

<400>  351

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Ala
            100   105   110

Asp Ile Trp Leu
        115

<210> 352
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v22 IgV

<400> 352

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Lys Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  353
<211>  122
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD155 IgV wildtype

<400>  353

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  354
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v1 IgV

<400>  354

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Ser
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 355
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v2 IgV

<400> 355

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Pro Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 356
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v3 IgV

<400> 356

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Pro Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 357
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v4 IgV

<400> 357

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Val Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 358
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v5 IgV

<400> 358

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Val Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  359
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v6 IgV

<400>  359

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  360
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v7 IgV

<400>  360

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 361
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v8 IgV

<400> 361

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Pro Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 362
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v9 IgV

<400> 362

Trp Pro Pro Pro Gly Thr Glu Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Cys Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 363
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v10 IgV

<400> 363

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Asp Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 364
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v11 IgV

<400> 364

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Pro Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 365
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v12 IgV

<400> 365

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Leu Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 366
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v14 IgV

<400> 366

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  367
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v15 IgV

<400>  367

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu His Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  368
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v16 IgV

<400>  368

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Cys Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 369
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v17 IgV

<400> 369

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

```
Val Glu Pro Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  370
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v18 IgV

<400>  370

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Pro Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95
```

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 371
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v19 IgV

<400> 371

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu His Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 372
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v20 IgV

<400> 372

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Glu Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Val Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 373
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v21 IgV

<400> 373

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Ala Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 374
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v22 IgV

<400> 374

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Lys Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  375
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v23 ECD

<400>  375

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 376
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v24 ECD

<400> 376

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  377
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v25 ECD

<400>  377

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  378
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v26 ECD

<400>  378

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
245 250 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
260 265 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 379
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v27 ECD

<400> 379

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  380
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v28 ECD

<400>  380

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  381
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v39 ECD

<400>  381

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  382
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v30 ECD

<400>  382

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Trp Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 383
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v31 ECD

<400> 383

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 384
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v32 ECD

<400> 384

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Trp Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 385
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v33 ECD

<400> 385

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

```
Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  386
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v34 ECD

<400>  386

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110
```

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 387
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v35 ECD

<400> 387

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 388
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v36 ECD

<400> 388

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Gln Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125
```

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 389
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v37 ECD

<400> 389

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 390
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v38 ECD

<400> 390

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 391
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v39 ECD

<400> 391

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 392
<211> 323

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v40 ECD

<400> 392

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 393
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v41 ECD

<400> 393

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 394
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v42 ECD

<400> 394

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 395
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v43 ECD

<400> 395

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
130 135 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145 150 155 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
165 170 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
180 185 190

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 396
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v44 ECD

<400> 396

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 397
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v45 ECD

<400> 397

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Met Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 398
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v46 ECD

<400> 398

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  399
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v47 ECD

<400>  399

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  400
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v48 ECD

<400>  400

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Gln Gly Ser Met Ala Leu Phe His Gln Thr Tyr Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  401
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v49 ECD

<400>  401

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  402
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v50 ECD

<400>  402

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
245 250 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
260 265 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 403
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v51 ECD

<400> 403

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  404
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v52 ECD

<400>  404

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  405
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v53 ECD

<400>  405

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  406
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v54 ECD

<400>  406

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 407
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v55 ECD

<400> 407

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Leu Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

```
Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 408
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v56 ECD

<400> 408

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 409
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v57 ECD

<400> 409

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 410
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v58 ECD

<400> 410

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 411
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v59 ECD

<400> 411

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 412
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v60 ECD

<400> 412

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Val Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125
```

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 413
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v61 ECD

<400> 413

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
130 135 140

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 414
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v62 ECD

<400> 414

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 415
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v63 ECD

<400> 415

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Glu Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
130 135 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145 150 155 160

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 416
<211> 323

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v64 ECD

<400> 416

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 417
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v65 ECD

<400> 417

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 418
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v66 ECD

<400> 418

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 419
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v67 ECD

<400> 419

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
130 135 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145 150 155 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
165 170 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
180 185 190

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 420
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v68 ECD

<400> 420

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 421
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v69 ECD

<400> 421

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 422
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v70 ECD

<400> 422

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Ala His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
    50                  55                  60

Asn Tyr Leu Glu Ser Lys Arg Leu Gly Phe Val Ala Ala Gly Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  423
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v71 ECD

<400>  423

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
    50                  55                  60

Asn Tyr Leu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 424
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v72 ECD

<400> 424

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  425
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v73 ECD

<400>  425

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
    50                  55                  60

Asn Tyr Leu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Pro Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  426
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v74 ECD

<400>  426

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
245 250 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
260 265 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 427
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v75 ECD

<400> 427

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  428
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v76 ECD

<400>  428

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  429
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v77 ECD

<400>  429

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  430
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v78 ECD

<400>  430

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
    50                  55                  60


His Tyr His Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  431
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v79 ECD

<400>  431

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 432
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v80 ECD

<400> 432

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Gly Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser
65 70 75 80

Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

```
Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 433
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v81 ECD

<400> 433

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Pro Val Thr His Val Pro Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

```
Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  434
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v82 ECD

<400>  434

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn
            100                 105                 110
```

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

```
Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  435
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v83 ECD

<400>  435

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Val Arg Leu Ser
65                  70                  75                  80


Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125
```

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 436
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v84 ECD

<400> 436

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Ser Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser
65                  70                  75                  80


Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125
```

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 437
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v85 ECD

<400> 437

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 438
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v86 ECD

<400> 438

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr His Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 439
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v87 ECD

<400> 439

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Lys Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 440
<211> 323

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v88 ECD

<400> 440

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 441
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v89 ECD

<400> 441

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 442
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v90 ECD

<400> 442

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Ala Phe His Gln Met Gln Gly Pro
    50                  55                  60


Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Asp
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  443
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v91 ECD
```

<400> 443

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Thr Phe His Gln Ser Gln Gly Pro
50 55 60

Tyr Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
130 135 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145 150 155 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
165 170 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
180 185 190

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 444
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v92 ECD

<400> 444

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 445
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v94 ECD

<400> 445

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Ala Phe His Gln Met Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  446
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v94 ECD

<400>  446

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Met Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 447
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v94 ECD

<400> 447

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Ala Gly Gln Leu Gly Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 448
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v96 ECD

<400> 448

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val His Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Ile Trp Ala Arg
        35                  40                  45

His Gly Glu Thr Arg His Met Ala Leu Phe Glu Gln Ser Gln Gly Pro
    50                  55                  60

Asp Tyr Ser Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  449
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v97 ECD

<400>  449

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Val Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Leu His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Trp Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  450
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v98 ECD

<400>  450

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ile Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  451
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v99 ECD

<400>  451

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Gly Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Ala Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  452
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v100 ECD

<400>  452

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val His Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr Arg Val Gly Gln Leu Ile Trp Ala Arg
        35                  40                  45


His Gly Glu Thr Arg His Met Ala Leu Phe Glu Gln Ser Gln Gly Pro
    50                  55                  60
```

```
Asp Tyr Ser Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Tyr Phe Leu Thr His Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  453
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v101 ECD

<400>  453

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Val Val Thr His Val Gly Gln Leu Gly Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  454
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v102 ECD

<400>  454

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  455
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v103 ECD

<400>  455

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 456
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v104 ECD

<400> 456

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Pro Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Gly Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 457
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v105 ECD

<400> 457

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asn Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

```
Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  458
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v106 ECD

<400>  458

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser
65                  70                  75                  80


Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110
```

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 459
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v107 ECD

<400> 459

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Thr Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 460
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v108 ECD

<400> 460

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gly Gly Ser Met Ala Ala Phe His Gln Thr Met Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125
```

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 461
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v109 ECD

<400> 461

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Val Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Asp Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
130 135 140

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 462
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v110 ECD

<400> 462

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro
    50                  55                  60


Thr Tyr Ser Glu Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Gly Ser Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asn Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 463
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v111 ECD

<400> 463

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Pro Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Gly Gln Gly Pro
    50                  55                  60


His Tyr Glu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asn Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 464
<211> 323

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v112 ECD

<400> 464

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro
    50                  55                  60


Thr Tyr Ser Glu Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Ala Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 465
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v113 ECD

<400> 465

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro
    50                  55                  60


Thr Tyr Ser Gly Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Gly Ser Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 466
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v114 ECD

<400> 466

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 467
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v115 ECD

<400> 467

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45

His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 468
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v116 ECD

<400> 468

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Phe Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Asp Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  469
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v117 ECD

<400>  469

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ser Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Lys Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 470
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v118 ECD

<400> 470

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 471
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v119 ECD

<400> 471

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 472
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v23 IgV

<400> 472

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 473
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v24 IgV

<400> 473

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  474
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v25 IgV

<400>  474

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 475
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v26 IgV

<400> 475

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 476
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v27 IgV

<400> 476

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu Arg Val Leu
        115

<210> 477
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v28 IgV

<400> 477

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 478
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v29 IgV

<400> 478

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 479
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v30 IgV

<400> 479

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Trp Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  480
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v31 IgV

<400>  480

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 481
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v32 IgV

<400> 481

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Trp Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  482
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v33 IgV

<400>  482

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  483
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v34 IgV

<400>  483

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Leu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110
```

Asp Ile Trp Leu
        115

<210> 484
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v35 IgV

<400> 484

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 485
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v36 IgV

<400> 485

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Gln Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 486
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v37 IgV

<400> 486

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 487
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v38 IgV

<400> 487

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  488
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v39 IgV

<400>  488

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 489
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v40 IgV

<400> 489

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  490
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v41 IgV

<400>  490

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 491
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v42 IgV

<400> 491

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 492
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v43 IgV

<400> 492

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 493
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v44 IgV

<400> 493

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 494
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v45 IgV

<400> 494

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Met Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 495
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v46 IgV

<400> 495

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Gln Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 496
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v47 IgV

<400> 496

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 497
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v48 IgV

<400> 497

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Gln Gly Ser Met Ala Leu Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  498
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v49 IgV

<400>  498

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 499
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v50 IgV

<400> 499

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 500
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v51 IgV

<400> 500

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 501
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v52 IgV

<400> 501

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Arg Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 502
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v53 IgV

<400> 502

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
35 40 45

Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 503
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v54 IgV

<400> 503

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Arg Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  504
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v55 IgV

<400>  504

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Leu Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 505
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v56 IgV

<400> 505

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Met Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 506
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v57 IgV

<400> 506

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 507
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v58 IgV

<400> 507

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
35 40 45

Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 508
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v59 IgV

<400> 508

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 509
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v60 IgV

<400> 509

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Val Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 510
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v61 IgV

<400> 510

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
35 40 45

Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 511
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v62 IgV

<400> 511

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  512
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v63 IgV

<400>  512

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Glu Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 513
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v64 IgV

<400> 513

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Met Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  514
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v65 IgV

<400>  514

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 515
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v66 IgV

<400> 515

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 516
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v67 IgV

<400> 516

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Leu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 517
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v68 IgV

<400> 517

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 518
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v69 IgV

<400> 518

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 519
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v70 IgV

<400> 519

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Ala His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro Asn Tyr Leu
    50                  55                  60

Glu Ser Lys Arg Leu Gly Phe Val Ala Ala Gly Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  520
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v71 IgV

<400>  520

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro Asn Tyr Leu
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 521
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v72 IgV

<400> 521

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  522
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v73 IgV

<400>  522

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro Asn Tyr Leu
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Pro Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 523
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v74 IgV

<400> 523

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 524
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v75 IgV

<400> 524

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 525
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v76 IgV

<400> 525

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 526
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v77 IgV

<400> 526

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 527
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v78 IgV

<400> 527

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro His Tyr His
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 528
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v79 IgV

<400> 528

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Glu Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 529
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v80 IgV

<400> 529

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Gly Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser Pro Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Tyr
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  530
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v81 IgV

<400>  530

Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Pro Val Thr His Val Pro Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Glu Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 531
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v82 IgV

<400> 531

Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Tyr
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 532
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v83 IgV

<400> 532

Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Val Arg Leu Ser Pro Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Tyr
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 533
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v84 IgV

<400> 533

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Ser Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser Pro Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Tyr
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 534
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v85 IgV

<400> 534

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 535
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v86 IgV

<400> 535

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr His Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 536
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v87 IgV

<400> 536

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Lys Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 537
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v88 IgV

<400> 537

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Gln Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  538
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v89 IgV

<400>  538

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35                  40                  45


Gln Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  539
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v90 IgV

<400>  539

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Ala Phe His Gln Met Gln Gly Pro Trp Tyr Ala
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Asp Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110
```

Asp Ile Trp Leu
        115

<210> 540
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v91 IgV

<400> 540

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Thr Phe His Gln Ser Gln Gly Pro Tyr Tyr Ala
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 541
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v92 IgV

<400> 541

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 542
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v93 IgV

<400> 542

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Ala Phe His Gln Met Gln Gly Pro Trp Tyr Ala
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 543
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v94 IgV

<400> 543

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Met Gln Gly Pro Trp Tyr Ala
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 544
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v95 IgV

<400> 544

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Ala Gly Gln Leu Gly Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 545
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v96 IgV

<400> 545

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val His Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Gly Gln Leu Ile Trp Ala Arg His Gly Glu
        35   40   45

Thr Arg His Met Ala Leu Phe Glu Gln Ser Gln Gly Pro Asp Tyr Ser
    50   55   60

```
Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  546
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v97 IgV

<400>  546

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Gly Gln Leu Val Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Leu His Gln Thr Gln Gly Pro Ser Tyr Trp
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  547
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v98 IgV

<400>  547

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Ile Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110
```

Asp Ile Trp Leu
        115

<210> 548
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v99 IgV

<400> 548

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Gly Gln Leu Gly Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Asn Phe Ala Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 549
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v100 IgV

<400> 549

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val His Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr Arg Val Gly Gln Leu Ile Trp Ala Arg His Gly Glu
35 40 45

Thr Arg His Met Ala Leu Phe Glu Gln Ser Gln Gly Pro Asp Tyr Ser
50 55 60

Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Tyr Phe Leu Thr His Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 550
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v101 IgV

<400> 550

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Val Val Thr His Val Gly Gln Leu Gly Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 551
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v102 IgV

<400> 551

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  552
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v103 IgV

<400>  552

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 553
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v104 IgV

<400> 553

Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Pro Val Thr His Val Leu Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Gly Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Glu Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 554
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v105 IgV

<400> 554

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg Arg Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asn Ile Trp Leu
115

<210> 555
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v106 IgV

<400> 555

Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser Pro Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 556
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v107 IgV

<400> 556

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Thr Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 557
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v108 IgV

<400> 557

Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Gly Gly Ser Met Ala Ala Phe His Gln Thr Met Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 558
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v109 IgV

<400> 558

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Val Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Asp Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115
```

<210> 559
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v110 IgV

<400> 559

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15
```

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg His Gly Glu
        35                  40                  45

Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro Thr Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Gly Ser Gly
                85                  90                  95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asn Ile Trp Leu
        115
```

<210> 560
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v111 IgV

<400> 560

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Pro Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Gly Gln Gly Pro His Tyr Glu
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asn Ile Trp Leu
        115

<210> 561
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v112 IgV

<400> 561

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg His Gly Glu
        35   40   45

Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro Thr Tyr Ser
    50   55   60

```
Glu Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Met Phe Ala Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  562
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v113 IgV

<400>  562

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg His Gly Glu
        35                  40                  45


Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro Thr Tyr Ser
    50                  55                  60


Gly Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80
```

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Gly Ser Gly
85 90 95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 563
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v114 IgV

<400> 563

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
35 40 45

Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
        115

<210> 564
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v115 IgV

<400> 564

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Pro Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg His Gly Glu
        35   40   45

Glu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 565
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v116 IgV

<400> 565

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Asp Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 566
<211> 116
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v117 IgV

<400> 566

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Ser Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Lys Gln Gly Pro Trp Tyr Ala
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 567
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v118 IgV

<400> 567

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

```
Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  568
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v119 IgV

<400>  568

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Trp Tyr Ala
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 569
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v23 IgV

<400> 569

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  570
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v24 IgV

<400>  570

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 571
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v25 IgV

<400> 571

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  572
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v26 IgV

<400>  572

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 573
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v27 IgV

<400> 573

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 574
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v28 IgV

<400> 574

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 575
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v29 IgV

<400> 575

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  576
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v30 IgV

<400>  576

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Trp Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 577
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v31 IgV

<400> 577

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  578
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v32 IgV

<400>  578

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Trp Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 579
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v33 IgV

<400> 579

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 580
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v34 IgV

<400> 580

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 581
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v35 IgV

<400> 581

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 582
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v36 IgV

<400> 582

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Gln Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 583
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v37 IgV

<400> 583

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 584
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v38 IgV

<400> 584

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 585
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v39 IgV

<400> 585

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  586
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v40 IgV

<400>  586

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 587
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v41 IgV

<400> 587

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  588
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v42 IgV

<400>  588

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 589
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v43 IgV

<400> 589

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 590
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v44 IgV

<400> 590

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 591
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v45 IgV

<400> 591

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Met Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  592
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v46 IgV

<400>  592

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 593
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v47 IgV

<400> 593

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  594
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v48 IgV

<400>  594

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Leu Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 595
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v49 IgV

<400> 595

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  596
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v50 IgV

<400>  596

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 597
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v51 IgV

<400> 597

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 598
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v52 IgV

<400> 598

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Trp Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 599
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v53 IgV

<400> 599

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45

His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 600
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v54 IgV

<400> 600

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 601
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v55 IgV

<400> 601

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Leu Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  602
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v56 IgV

<400>  602

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 603
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v57 IgV

<400> 603

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 604
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v58 IgV

<400> 604

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35   40   45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 605
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v59 IgV

<400> 605

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 606
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v60 IgV

<400> 606

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Val Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 607
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v61 IgV

<400> 607

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45

His Gly Glu Arg Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 608
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v62 IgV

<400> 608

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 609
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v63 IgV

<400> 609

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Glu Gly Ser Met Ala Leu Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  610
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v64 IgV

<400>  610

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Cys Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Met Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 611
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v65 IgV

<400> 611

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 612
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v66 IgV

<400> 612

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ala Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 613
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v67 IgV

<400> 613

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Leu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 614
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v68 IgV

<400> 614

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Asn Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 615
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v69 IgV

<400> 615

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  616
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v70 IgV

<400>  616

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Ala His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
50 55 60

Asn Tyr Leu Glu Ser Lys Arg Leu Gly Phe Val Ala Ala Gly Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 617
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v71 IgV

<400> 617

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
50 55 60

```
Asn Tyr Leu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  618
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v72 IgV

<400>  618

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 619
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v73 IgV

<400> 619

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
50 55 60

Asn Tyr Leu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Pro Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  620
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v74 IgV

<400>  620

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 621
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v75 IgV

<400> 621

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 622
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v76 IgV

<400> 622

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 623
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v77 IgV

<400> 623

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 624
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v78 IgV

<400> 624

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Arg Gln Gly Pro
50 55 60

His Tyr His Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 625
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v79 IgV

<400> 625

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  626
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v80 IgV

<400>  626

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gly Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser
65                  70                  75                  80
```

Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 627
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v81 IgV

<400> 627

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Pro Val Thr His Val Pro Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 628
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v82 IgV

<400> 628

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1   5   10   15

Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85   90   95

Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 629
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v83 IgV

<400> 629

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Val Arg Leu Ser
65 70 75 80

Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 630
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v84 IgV

<400> 630

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Ser Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser
65 70 75 80

Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Tyr Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Asn
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 631
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v85 IgV

<400> 631

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  632
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v86 IgV

<400>  632

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr His Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 633
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v87 IgV

<400> 633

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Lys Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  634
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v88 IgV

<400>  634

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 635
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v89 IgV

<400> 635

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  636
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v90 IgV

<400>  636

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Ala Phe His Gln Met Gln Gly Pro
    50                  55                  60


Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Asp
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 637
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v91 IgV

<400> 637

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Thr Phe His Gln Ser Gln Gly Pro
50 55 60

Tyr Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 638
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v92 IgV

<400> 638

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 639
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v93 IgV

<400> 639

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Ala Phe His Gln Met Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 640
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v94 IgV

<400> 640

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Met Gln Gly Pro
50 55 60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 641
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v95 IgV

<400> 641

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Ala Gly Gln Leu Gly Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  642
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v96 IgV

<400>  642

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val His Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Ile Trp Ala Arg
        35                  40                  45


His Gly Glu Thr Arg His Met Ala Leu Phe Glu Gln Ser Gln Gly Pro
    50                  55                  60


Asp Tyr Ser Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 643
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v97 IgV

<400> 643

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Val Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Leu His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Trp Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  644
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v98 IgV

<400>  644

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ile Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 645
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v99 IgV

<400> 645

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Gly Gln Leu Gly Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Ala Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 646
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v100 IgV

<400> 646

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val His Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr Arg Val Gly Gln Leu Ile Trp Ala Arg
35 40 45

His Gly Glu Thr Arg His Met Ala Leu Phe Glu Gln Ser Gln Gly Pro
50 55 60

Asp Tyr Ser Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Tyr Phe Leu Thr His Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 647
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v101 IgV

<400> 647

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Val Val Thr His Val Gly Gln Leu Gly Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Asn Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 648
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v102 IgV

<400> 648

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 649
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v103 IgV

<400> 649

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  650
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v104 IgV

<400>  650

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Pro Val Thr His Val Leu Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Gly Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 651
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v105 IgV

<400> 651

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asn Ile Trp Leu Arg Val Leu
        115                 120


<210>  652
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v106 IgV

<400>  652

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Met Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Ser
65                  70                  75                  80


Pro Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 653
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v107 IgV

<400> 653

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Thr Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 654
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v108 IgV

<400> 654

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Arg Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Tyr Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Pro Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Gly Gly Ser Met Ala Ala Phe His Gln Thr Met Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 655
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v109 IgV

<400> 655

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Val Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Tyr Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Asp Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  656
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v110 IgV

<400>  656

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg
35 40 45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro
50 55 60

Thr Tyr Ser Glu Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Gly Ser Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asn Ile Trp Leu Arg Val Leu
115 120

<210> 657
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v111 IgV

<400> 657

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Pro Gln Leu Gln Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Gly Gln Gly Pro
50 55 60

```
His Tyr Glu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asn Ile Trp Leu Arg Val Leu
        115                 120


<210>  658
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v112 IgV

<400>  658

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg
        35                  40                  45


His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro
    50                  55                  60


Thr Tyr Ser Glu Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80
```

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Ala Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 659
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v113 IgV

<400> 659

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr Thr Met Ser Gln Leu Thr Trp Val Arg
35 40 45

His Gly Glu Gln Gly Ser Met Ala Val Phe His Gln Thr Leu Gly Pro
50 55 60

Thr Tyr Ser Gly Ser Lys Arg Leu Arg Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Gly Ser Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  660
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v114 IgV

<400>  660

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 661
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v115 IgV

<400> 661

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Pro Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Gln Trp Ala Arg
        35                  40                  45


His Gly Glu Glu Gly Ser Met Ala Val Phe His Gln Thr Phe Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 662
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v116 IgV

<400> 662

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Asp Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 663
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v117 IgV

<400> 663

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

```
Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ser Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Lys Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  664
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v118 IgV

<400>  664

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 665
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v119 IgV

<400> 665

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  666
<211>  125
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD112 IgV

<400>  666

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 667
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v1 ECD

<400> 667

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Asp Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  668
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v2 ECD

<400>  668

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Ala Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Gly
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Gly
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Ser Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

```
Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  669
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v3 ECD

<400>  669

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305 310 315 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 670
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v4 ECD

<400> 670

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Val Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ile
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 671
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v5 ECD

<400> 671

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 672
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v6 ECD

<400> 672

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Asn Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Ala Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 673
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v7 ECD

<400> 673

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140
```

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 674
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v8 ECD

<400> 674

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn Tyr
35 40 45

Gln Asn Val Ala Ala Ser His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 675
<211> 329

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v9 ECD

<400> 675

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 676
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v10 ECD

<400> 676

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Ser Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 677
<211> 329
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v11 ECD

<400> 677

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 678
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v12 ECD

<400> 678

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190
```

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 679
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v13 ECD

<400> 679

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                  10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190
```

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  680
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v14 ECD

<400>  680

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Thr Pro
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 681
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v15 ECD

<400> 681

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Ser Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  682
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v16 ECD

<400>  682

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  683
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v17 ECD

<400>  683

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Ser Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  684
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v18 ECD

<400>  684

Gln Asp Val Arg Val Gln Val Leu Ser Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Ser His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  685
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v19 ECD

<400>  685

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys His Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  686
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v20 ECD

<400>  686

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Leu Pro Val Pro Gly Pro
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  687
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v21 ECD

<400>  687

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Asp Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  688
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v22 ECD

<400>  688

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Pro Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  689
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v23 ECD

<400>  689

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Ala Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  690
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v24 ECD

<400>  690

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Ser Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  691
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v25 ECD

<400>  691

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  692
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v26 ECD

<400>  692

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

```
Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  693
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v27 ECD

<400>  693

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Arg Gln Ser
65                  70                  75                  80


Thr Gly Gln Gly Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

```
Thr Ser Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305 310 315 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 694
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v28 ECD

<400> 694

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Leu His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 695
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v29 ECD

<400> 695

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 696
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v30 ECD

<400> 696

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Val Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 697
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v31 ECD

<400> 697

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140
```

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 698
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v32 ECD

<400> 698

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 699
<211> 329

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v33 ECD

<400> 699

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Met Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160
```

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 700
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v34 ECD

<400> 700

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 701
<211> 329
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v35 ECD

<400> 701

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Ala Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Ser Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 702
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v36 ECD

<400> 702

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys Arg Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Asn Trp Gln Arg Pro Gly Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
165 170 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
180 185 190

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 703
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v37 ECD

<400> 703

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                  10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190
```

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  704
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v38 ECD

<400>  704

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 705
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v39 ECD

<400> 705

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  706
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v40 ECD

<400>  706

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Ile Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  707
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v41 ECD

<400>  707

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  708
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v42 ECD

<400>  708

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  709
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v43 ECD

<400>  709

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 710
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v44 ECD

<400> 710

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Arg Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  711
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v45 ECD

<400>  711

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 712
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v46 ECD

<400> 712

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Ile Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  713
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v47 ECD

<400>  713

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Leu Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Met Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 714
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v1 IgV

<400> 714

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Asp Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  715
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v2 IgV

<400>  715

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Ala Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Gly
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Gly
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Ser Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 716
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v3 IgV

<400> 716

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 717
<211> 125

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v4 IgV

<400> 717

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Val Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ile
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 718
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v5 IgV

<400> 718

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 719
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v6 IgV

<400> 719

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Asn Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Ala Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 720
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v7 IgV

<400> 720

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 721
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v8 IgV

<400> 721

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn Tyr
        35                  40                  45

Gln Asn Val Ala Ala Ser His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  722
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v9 IgV

<400>  722

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  723
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v10 IgV

<400>  723

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110
```

Ser Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 724
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v11 IgV

<400> 724

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100   105   110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 725
<211> 125

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v12 IgV

<400> 725

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 726
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v13 IgV

<400> 726

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 727
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v14 IgV

<400> 727

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Thr Pro
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 728
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v15 IgV

<400> 728

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Ser Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 729
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v16 IgV

<400> 729

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  730
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v17 IgV

<400>  730

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Ser Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  731
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v18 IgV

<400>  731

Gln Asp Val Arg Val Gln Val Leu Ser Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Ser His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 732
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v19 IgV

<400> 732

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys His Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 733
<211> 125

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v20 IgV

<400> 733

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Leu Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 734
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v21 IgV

<400> 734

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Asp Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 735
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v22 IgV

<400> 735

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Pro Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 736
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v23 IgV

<400> 736

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
35 40 45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Ala Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  737
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v24 IgV

<400>  737

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Ser Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 738
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v25 IgV

<400> 738

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  739
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v26 IgV

<400>  739

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 740
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v27 IgV

<400> 740

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Arg Gln Ser
65   70   75   80

Thr Gly Gln Gly Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Ser Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 741
<211> 125

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v28 IgV

<400> 741

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Leu His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 742
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v29 IgV

<400> 742

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 743
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v30 IgV

<400> 743

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Val Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 744
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v31 IgV

<400> 744

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 745
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v32 IgV

<400> 745

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 746
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v33 IgV

<400> 746

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Met Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  747
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v34 IgV

<400>  747

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 748
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v35 IgV

<400> 748

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Ala Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Ser Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 749
<211> 125

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v36 IgV

<400> 749

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys Arg Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Asn Trp Gln Arg Pro Gly Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 750
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v37 IgV

<400> 750

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 751
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v38 IgV

<400> 751

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 752
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v39 IgV

<400> 752

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 753
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v40 IgV

<400> 753

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Ile Thr Trp Leu
115 120 125

<210> 754
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v41 IgV

<400> 754

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  755
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v42 IgV

<400>  755

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 756
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v43 IgV

<400> 756

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 757
<211> 125

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v44 IgV

<400> 757

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Arg Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 758
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v45 IgV

<400> 758

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 759
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v46 IgV

<400> 759

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Ile Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 760
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v47 IgV

<400> 760

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

```
Gln Asn Val Ala Ala Phe His Leu Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Met Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 761
<211> 127
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD112 IgV Wildtype

<400> 761

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  762
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v1 IgV

<400>  762

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Asp Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 763
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v2 IgV

<400> 763

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Ala Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Gly
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Gly
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Ser Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 764
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v3 IgV

<400> 764

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 765
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v4 IgV

<400> 765

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Val Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ile
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 766
<211> 127
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v5 IgV

<400> 766

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 767
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v6 IgV

<400> 767

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Asn Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Ala Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  768
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v7 IgV

<400>  768

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 769
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v8 IgV

<400> 769

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn Tyr
35 40 45

Gln Asn Val Ala Ala Ser His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  770
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v9 IgV

<400>  770

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 771
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v10 IgV

<400> 771

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Ser Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 772
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v11 IgV

<400> 772

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100   105   110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 773
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v12 IgV

<400> 773

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 774
<211> 127
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v13 IgV

<400> 774

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 775
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v14 IgV

<400> 775

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Thr Pro
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  776
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v15 IgV

<400>  776

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Ser Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 777
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v16 IgV

<400> 777

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  778
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v17 IgV

<400>  778

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Ser Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 779
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v18 IgV

<400> 779

Gln Asp Val Arg Val Gln Val Leu Ser Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Ser His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

```
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  780
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v19 IgV

<400>  780

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys His Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 781
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v20 IgV

<400> 781

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Leu Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 782
<211> 127
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v21 IgV

<400> 782

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Asp Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 783
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v22 IgV

<400> 783

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Pro Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 784
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v23 IgV

<400> 784

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20                  25                  30
```

Tyr Ile Ser Leu Val Thr Trp Gln Arg Ser Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Ala Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 785
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v24 IgV

<400> 785

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Ser Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  786
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v25 IgV

<400>  786

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 787
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v26 IgV

<400> 787

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 788
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v27 IgV

<400> 788

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Arg Gln Ser
65   70   75   80

Thr Gly Gln Gly Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Ser Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 789
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v28 IgV

<400> 789

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Leu His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 790
<211> 127
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v29 IgV

<400> 790

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 791
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v30 IgV

<400> 791

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Val Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 792
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v31 IgV

<400> 792

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 793
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v32 IgV

<400> 793

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  794
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v33 IgV

<400>  794

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Met Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 795
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v34 IgV

<400> 795

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

```
Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  796
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v35 IgV

<400>  796

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Ala Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Ser Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 797
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v36 IgV

<400> 797

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys Arg Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Asn Trp Gln Arg Pro Gly Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 798
<211> 127
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v37 gV

<400> 798

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 799
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v38 gV

<400> 799

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  800
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v39 gV

<400>  800

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 801
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v40 gV

<400> 801

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Ile Thr Trp Leu Arg Val
        115                 120                 125


<210>  802
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v41 gV

<400>  802

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 803
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v42 gV

<400> 803

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 804
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v43 gV

<400> 804

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 805
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v44 gV

<400> 805

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ser Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Arg Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 806
<211> 127
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v45 IgV

<400> 806

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Ala Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 807
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v46 IgV

<400> 807

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Ile Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  808
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v47 IgV

<400>  808

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Leu Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Met Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 809
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v48 ECD

<400> 809

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  810
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v49 ECD

<400>  810

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Arg Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Thr Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 811
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v50 ECD

<400> 811

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Tyr Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  812
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v51 ECD

<400>  812

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Arg Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
275 280 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
290 295 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305 310 315 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 813
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v52 ECD

<400> 813

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Met Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Ala Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  814
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v53 ECD

<400>  814

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  815
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v54 ECD

<400>  815

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

```
Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  816
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v55 ECD

<400>  816

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Arg Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305 310 315 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 817
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v56 ECD

<400> 817

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Arg Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 818
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v57 ECD

<400> 818

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 819
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v58 ECD

<400> 819

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 820
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v59 ECD

<400> 820

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Ala Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140
```

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 821
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v60 ECD

<400> 821

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 822
<211> 329

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v61 ECD

<400> 822

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Met Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160
```

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 823
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v62 ECD

<400> 823

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 824
<211> 329
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v63 ECD

<400> 824

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 825
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v64 ECD

<400> 825

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
165 170 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
180 185 190

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 826
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v65 ECD

<400> 826

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                  10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Ser Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Met Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190
```

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  827
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v66 ECD

<400>  827

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Ala Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Glu Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 828
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v67 ECD

<400> 828

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Ala Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  829
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v68 ECD

<400>  829

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  830
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v69 ECD

<400>  830

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  831
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v70 ECD

<400>  831

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  832
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v71 ECD

<400>  832

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 833
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v72 ECD

<400> 833

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Ser Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  834
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v73 ECD

<400>  834

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 835
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v74 ECD

<400> 835

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  836
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v75 ECD

<400>  836

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 837
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v76 ECD

<400> 837

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Met Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  838
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v77 ECD

<400>  838

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Ala Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  839
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v78 ECD

<400>  839

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

```
Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  840
<211>  329
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v79 ECD

<400>  840

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Gly Phe Val
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305 310 315 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 841
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v80 ECD

<400> 841

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 842
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v81 ECD

<400> 842

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 843
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v82 ECD

<400> 843

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Asp Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 844
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v83 ECD

<400> 844

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Ser Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140
```

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 845
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v84 ECD

<400> 845

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Ser Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 846
<211> 329

<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v85 ECD

<400> 846

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160
```

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 847
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v86 ECD

<400> 847

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 848
<211> 329
<212> PRT
<213> Artificial Sequence

<220>

<223> CD112 v87 ECD

<400> 848

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 849
<211> 329
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v88 ECD

<400> 849

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
165 170 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
180 185 190

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 850
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v48 IgV

<400> 850

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  851
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v49 IgV

<400>  851

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Arg Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Thr Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  852
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v50 IgV

<400>  852

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Tyr Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 853
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v51 IgV

<400> 853

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Arg Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 854
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v52 IgV

<400> 854

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Met Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Ala Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 855
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v53 IgV

<400> 855

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 856
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v54 IgV

<400> 856

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100   105   110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 857
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v55 IgV

<400> 857

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Arg Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 858
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v56 IgV

<400> 858

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Gly Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  859
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v57 IgV

<400>  859

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  860
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v58 IgV

<400>  860

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 861
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v59 IgV

<400> 861

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Ala Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  862
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v60 IgV

<400>  862

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 863
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v61 IgV

<400> 863

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Met Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 864
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v62 IgV

<400> 864

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 865
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v63 IgV

<400> 865

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 866
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v64 IgV

<400> 866

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  867
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v65 IgV

<400>  867

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Ser Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Met Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  868
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v66 IgV

<400>  868

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Ala Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Glu Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 869
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v67 IgV

<400> 869

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Ala Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 870
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v68 IgV

<400> 870

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  871
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v69 IgV

<400>  871

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 872
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v70 IgV

<400> 872

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 873
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v71 IgV

<400> 873

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 874
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v72 IgV

<400> 874

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Ser Met Thr Trp Leu
        115                 120                 125


<210>  875
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v73 IgV

<400>  875

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  876
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v74 IgV

<400>  876

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 877
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v75 IgV

<400> 877

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 878
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v76 IgV

<400> 878

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Met Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 879
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v77 IgV

<400> 879

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Ala Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 880
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v78 IgV

<400> 880

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 881
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v79 IgV

<400> 881

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Gly Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 882
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v80 IgV

<400> 882

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  883
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v81 IgV

<400>  883

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  884
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v82 IgV

<400>  884

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Asp Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 885
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v83 IgV

<400> 885

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Ser Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 886
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v84 IgV

<400> 886

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Ser Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  887
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v85 IgV

<400>  887

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 888
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v86 IgV

<400> 888

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 889
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v87 IgV

<400> 889

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 890
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v88 IgV

<400> 890

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 891
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v48 IgV

<400> 891

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 892
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v49 IgV

<400> 892

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Arg Arg Pro Asp Ala Pro Ala Asn His
35 40 45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Thr Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 893
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v50 IgV

<400> 893

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Tyr Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 894
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v51 IgV

<400> 894

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Arg Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 895
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v52 IgV

<400> 895

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Met Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Ala Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 896
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v53 IgV

<400> 896

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 897
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v54 IgV

<400> 897

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 898
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v55 IgV

<400> 898

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Arg Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  899
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v56 IgV

<400>  899

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Gly Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 900
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v57 IgV

<400> 900

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 901
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v58 IgV

<400> 901

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 902
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v59 IgV

<400> 902

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Ala Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 903
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v60 IgV

<400> 903

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Val Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 904
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v61 IgV

<400> 904

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Met Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 905
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v62 IgV

<400> 905

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 906
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v63 IgV

<400> 906

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  907
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v64 IgV

<400>  907

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  908
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v65 IgV

<400>  908

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Ser Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Met Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 909
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v66 IgV

<400> 909

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Ala Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Glu Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 910
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v67 IgV

<400> 910

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Ala Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 911
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v68 IgV

<400> 911

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 912
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v69 IgV

<400> 912

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100   105   110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 913
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v70 IgV

<400> 913

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 914
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v71 IgV

<400> 914

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  915
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v72 IgV

<400>  915

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Ser Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  916
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v73 IgV

<400>  916

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 917
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v74 IgV

<400> 917

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 918
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v75 IgV

<400> 918

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 919
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v76 IgV

<400> 919

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Met Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 920
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v77 IgV

<400> 920

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Pro
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Ala Cys Glu Phe Ala
            100   105   110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 921
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v78 IgV

<400> 921

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 922
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v79 IgV

<400> 922

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Gly Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  923
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v80 IgV

<400>  923

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  924
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v81 IgV

<400>  924

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 925
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v82 IgV

<400> 925

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80
```

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Asp Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 926
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v83 IgV

<400> 926

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Ser Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  927
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v84 IgV

<400>  927

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Ser Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 928
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v85 IgV

<400> 928

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 929
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v86 IgV

<400> 929

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 930
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CD112 v87 IgV

<400> 930

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  931
<211>  127
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD112 v88 IgV

<400>  931

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  932
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v122 ECD

<400>  932

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 933
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v123 ECD

<400> 933

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Phe Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  934
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v124 ECD

<400>  934

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 935
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v125 ECD

<400> 935

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Thr Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  936
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v126 ECD

<400>  936

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Arg Leu Ser Arg
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 937
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v127 ECD

<400> 937

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  938
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v128 ECD

<400>  938

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Arg Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 939
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v130 ECD

<400> 939

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Val Val Leu Thr Met Met Ser Gly Asp Thr Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 940
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v131 ECD

<400> 940

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Pro Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Thr Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  941
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v132 ECD

<400>  941

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Ile Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Met Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 942
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v133 ECD

<400> 942

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Gly Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  943
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v134 ECD

<400>  943

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Ala Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Thr Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 944
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v135 ECD

<400> 944

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Met Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  945
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v136 ECD

<400>  945

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Pro Arg Pro Ser Asp Glu Gly Ile Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  946
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v137 ECD

<400>  946

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Ser Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 947
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v138 ECD

<400> 947

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Pro Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  948
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v139 ECD

<400>  948

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Pro Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 949
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v140 ECD

<400> 949

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Ser Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  950
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v141 ECD

<400>  950
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```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Thr Val Ile Leu Ala Leu Arg Ser Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Gly Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Asp His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 951
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v142 ECD

<400> 951

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  952
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v143 ECD

<400>  952

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Ala Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Asn Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 953
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v144 ECD

<400> 953

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Lys Cys Val Val Leu Lys Tyr Glu Lys Asp Ser Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 954
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v145 ECD

<400> 954

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Val Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 955
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v146 ECD

<400> 955

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Glu Glu Lys Lys Met Val Leu Ala Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Val Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  956
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v147 ECD

<400>  956

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Ala Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 957
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v148 ECD

<400> 957

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  958
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v149 ECD

<400>  958

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 959
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v150 ECD

<400> 959

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Arg Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Ala Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  960
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v151 ECD

<400>  960

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Glu Lys Glu Lys Lys Met Val Leu Ala Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 961
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v152 ECD

<400> 961

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val His
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 962
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v153 ECD

<400> 962

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  963
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v154 ECD

<400>  963

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 964
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v155 ECD

<400> 964

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Ser Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 965
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v156 ECD

<220>
<221> VARIANT
<222> (24)..(24)
<223> X is a stop codon

<400> 965

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Xaa Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Asn Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Val Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  966
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v157 ECD

<400>  966

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 967
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v158 ECD

<400> 967

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  968
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v159 ECD

<400>  968

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Ile Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Val Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 969
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v160 ECD

<400> 969

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Ala Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  970
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v161 ECD

<400>  970

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 971
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v162 ECD

<400> 971

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Ile Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  972
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v163 ECD

<400>  972

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  973
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v164 ECD

<400>  973

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Lys His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 974
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v165 ECD

<400> 974

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  975
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v166 ECD

<400>  975

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 976
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v167 ECD

<400> 976

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Leu Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  977
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v168 ECD

<400>  977
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Ile Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 978
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v169 ECD

<400> 978

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Arg Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Val Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  979
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v170 ECD

<400>  979

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  980
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v171 ECD

<400>  980

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 981
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v172 ECD

<400> 981

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 982
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v173 ECD

<400> 982

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Leu Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  983
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v174 ECD

<400>  983

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Pro Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 984
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v175 ECD

<400> 984

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  985
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v176 ECD

<400>  985

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Leu Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 986
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v177 ECD

<400> 986

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Phe Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Ile Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  987
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v178 ECD

<400>  987

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Ala Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 988
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v179 ECD

<400> 988

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Thr Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  989
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v180 ECD

<400>  989

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  990
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v181 ECD

<400>  990

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Asp Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Val Ile Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Val Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 991
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v182 ECD

<400> 991

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Met Ile Met Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Lys His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  992
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v183 ECD

<400>  992

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Ile Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Phe Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 993
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v184 ECD

<400> 993

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  994
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v185 ECD

<400>  994

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 995
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v186 ECD

<400> 995

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Val Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 996
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v187 ECD

<400> 996

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  997
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v188 ECD

<400>  997

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Gly Glu Leu Ser Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Asn Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 998
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v189 ECD

<400> 998

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Thr Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Asp Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Val Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Val His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  999
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v190 ECD

<400>  999

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Leu Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser His Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 1000
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v191 ECD

<400> 1000

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  1001
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v192 ECD

<400>  1001
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 1002
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v193 ECD

<400> 1002

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  1003
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v194 ECD

<400>  1003

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 1004
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v195 ECD

<400> 1004

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Leu Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Arg Trp Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 1005
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 WT IgV

<400> 1005

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1006
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v122 IgV

<400> 1006

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1007
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v123 IgV

<400>  1007

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Phe Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 1008
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v124 IgV

<400> 1008

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 1009
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v125 IgV

<400> 1009

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Thr Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1010
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v126 IgV

<400> 1010

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Arg Leu Ser Arg
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1011
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v127 IgV

<400> 1011

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1012
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v128 IgV

<400> 1012

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Arg Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1013
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v130 IgV

<400> 1013

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Val Val Leu Thr Met Met Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1014
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v131 IgV

<400> 1014

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Pro Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Thr Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1015
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v132 IgV

<400> 1015

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Ile Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Met Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1016
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v133 IgV

<400> 1016

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Gly Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1017
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v134 IgV

<400>  1017

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ala Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Thr Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1018
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v135 IgV

<400> 1018

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Met Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1019
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v136 IgV

<400> 1019

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Pro Arg Pro Ser Asp Glu Gly Ile Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1020
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v137 IgV

<400> 1020

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Ser Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1021
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v138 IgV

<400> 1021

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Pro Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1022
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v139 IgV

<400> 1022

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Pro Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1023
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v140 IgV

<400>  1023

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Ser Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 1024
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v141 IgV

<400> 1024

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Thr Val Ile Leu Ala Leu Arg Ser Ser Asp Glu Gly Thr Tyr
65 70 75 80

Gly Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Asp His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1025
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v142 IgV

<400> 1025

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85 90 95

Leu Ala Glu Val Thr
            100

<210> 1026
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v143 IgV

<400> 1026

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Ala Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Asn Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1027
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v144 IgV

<400>  1027

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Lys Cys Val Val Leu Lys Tyr Glu Lys Asp Ser Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1028
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v145 IgV

<400> 1028

Val Ile His Val Thr Lys Glu Val Lys Glu Val Val Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1029
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v146 IgV

<400> 1029

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Glu Glu Lys Lys Met Val Leu Ala Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Val Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1030
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v147 IgV

<400> 1030

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Ala Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 1031
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v148 IgV

<400> 1031

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 1032
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v149 IgV

<400> 1032

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 1033
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v150 IgV

<400> 1033

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Arg Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Ala Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1034
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v151 IgV

<400> 1034

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Glu Lys Glu Lys Lys Met Val Leu Ala Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1035
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v152 IgV

<400> 1035

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val His
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1036
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v153 IgV

<400>  1036

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1037
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v154 IgV

<400>  1037

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 1038
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v155 IgV

<400> 1038

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Ser Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1039
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v156 IgV

<220>
<221> VARIANT
<222> (24)..(24)
<223> X is a stop codon

<400> 1039

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Xaa Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Asn Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Val Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1040
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v157 IgV

<400> 1040

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1041
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v158 IgV

<400> 1041

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1042
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v159 IgV

<400>  1042

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Ile Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Val Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1043
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v160 IgV

<400> 1043

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Ala Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1044
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v161 IgV

<400> 1044

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1045
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v162 IgV

<400> 1045

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Ile Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 1046
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v163 IgV

<400> 1046

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 1047
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v164 IgV

<400> 1047

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Lys His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 1048
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v165 IgV

<400> 1048

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1049
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v166 IgV

<400> 1049

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1050
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v167 IgV

<400> 1050

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Leu Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1051
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v168 IgV

<400> 1051

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

```
Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Ile Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1052
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v169 IgV

<400>  1052

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Arg Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Val Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 1053
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v170 IgV

<400> 1053

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1054
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v171 IgV

<400> 1054

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1055
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v172 IgV

<400> 1055

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1056
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v173 IgV

<400>  1056

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Leu Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1057
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v174 IgV

<400> 1057

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Pro Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1058
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v175 IgV

<400> 1058

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1059
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v176 IgV

<400> 1059

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Leu Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1060
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v177 IgV

<400> 1060

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Phe Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Ile Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1061
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v178 IgV

<400> 1061

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ala Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1062
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v179 IgV

<400>  1062

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Thr Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 1063
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v180 IgV

<400> 1063

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1064
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v181 IgV

<400> 1064

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Asp Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Val Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Val Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1065
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v182 IgV

<400> 1065

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Met Ile Met Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Lys His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1066
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v183 IgV

<400> 1066

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Ile Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Phe Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1067
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v184 IgV

<400> 1067

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1068
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v185 IgV

<400> 1068

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 1069
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v186 IgV

<400> 1069

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Val Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 1070
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v187 IgV

<400> 1070

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 1071
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v188 IgV

<400> 1071

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Gly Glu Leu Ser Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Asn Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 1072
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v189 IgV

<400> 1072

Val Ile His Val Thr Lys Glu Val Lys Glu Val Thr Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Asp Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Val Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Val His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1073
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v190 IgV

<400> 1073

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Leu Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser His Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 1074
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v191 IgV

<400> 1074

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1075
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v192 IgV

<400>  1075

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  1076
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v193 IgV

<400>  1076

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 1077
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v194 IgV

<400> 1077

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1078
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v195 IgV

<400> 1078

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Leu Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Arg Trp Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 1079
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 WT IgV

<400> 1079

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1080
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v122 IgV

<400>  1080

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1081
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v123 IgV

<400> 1081

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Phe Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1082
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v124 IgV

<400> 1082

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1083
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v125 IgV

<400> 1083

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Thr Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1084
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v126 IgV

<400> 1084

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Arg Leu Ser Arg
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1085
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v127 IgV

<400> 1085

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1086
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v128 IgV

<400>  1086

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Arg Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1087
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v130 IgV

<400> 1087

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Val Val Leu Thr Met Met Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1088
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v131 IgV

<400> 1088

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Pro Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Thr Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1089
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v132 IgV

<400> 1089

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Ile Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Met Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1090
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v133 IgV

<400>  1090

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Gly Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1091
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v134 IgV

<400> 1091

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ala Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Thr Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1092
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v135 IgV

<400> 1092

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Met Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1093
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v136 IgV

<400> 1093

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Pro Arg Pro Ser Asp Glu Gly Ile Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1094
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v137 IgV

<400> 1094

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Pro Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Ser Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1095
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v138 IgV

<400> 1095

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Pro Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1096
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v139 IgV

<400>  1096

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Pro Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1097
<211>  107
<212>  PRT
<213>  Artificial Sequence
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<220>
<223> CD80 v140 IgV

<400> 1097

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Ser Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 1098
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v141 IgV

<400> 1098

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Thr Val Ile Leu Ala Leu Arg Ser Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Gly Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Asp His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1099
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v142 IgV

<400>  1099

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1100
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v143 IgV

<400> 1100

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Ala Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Asn Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1101
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v144 IgV

<400> 1101

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Lys Cys Val Val Leu Lys Tyr Glu Lys Asp Ser Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1102
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v145 IgV

<400> 1102

Val Ile His Val Thr Lys Glu Val Lys Glu Val Val Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1103
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v146 IgV

<400> 1103

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Glu Glu Lys Lys Met Val Leu Ala Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1104
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v147 IgV

<400>  1104

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Ala Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1105
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v148 IgV

<400> 1105

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1106
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v149 IgV

<400> 1106

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 1107
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v150 IgV

<400> 1107

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Arg Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Ala Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1108
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v151 IgV

<400> 1108

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Glu Lys Glu Lys Lys Met Val Leu Ala Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1109
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v152 IgV

<400> 1109

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val His
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1110
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v153 IgV

<400>  1110

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1111
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v154 IgV

<400> 1111

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1112
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v155 IgV

<400> 1112

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Ser Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1113
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v156 IgV


<220>
<221>  VARIANT
<222>  (24)..(24)
<223>  X is a stop codon

<400>  1113

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

Gly His Asn Val Ser Val Glu Xaa Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Asn Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Val Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1114
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v157 IgV

<400> 1114

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1115
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v158 IgV

<400>  1115

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1116
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v159 IgV

<400> 1116

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Ile Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Val Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1117
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v160 IgV

<400> 1117

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Ala Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1118
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v161 IgV

<400> 1118

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1119
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v162 IgV

<400>  1119

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Ile Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1120
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v163 IgV

<400>  1120

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1121
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v164 IgV

<400> 1121

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Lys His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1122
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v165 IgV

<400> 1122

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1123
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v166 IgV

<400> 1123

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1124
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v167 IgV

<400> 1124

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Leu Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1125
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v168 IgV

<400>  1125

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Ile Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1126
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v169 IgV

<400> 1126

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Arg Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Val Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1127
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v170 IgV

<400> 1127

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1128
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v171 IgV

<400>  1128

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1129
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v172 IgV

<400>  1129

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1130
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v173 IgV

<400> 1130

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Leu Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1131
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v174 IgV

<400> 1131

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Pro Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1132
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v175 IgV

<400> 1132

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1133
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v176 IgV

<400> 1133

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Leu Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1134
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v177 IgV

<400> 1134

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Phe Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Ile Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1135
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v178 IgV

<400> 1135

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Ala Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1136
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v179 IgV

<400> 1136

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly Tyr Asn Val Ser Val Glu Glu Leu Thr Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 1137
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v180 IgV

<400> 1137

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1138
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v181 IgV

<400> 1138

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Asp Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Val Ile Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Val Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1139
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v182 IgV

<400>  1139

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Met Ile Met Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Lys His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1140
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v183 IgV

<400> 1140

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Ile Arg Ile Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Phe Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1141
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v184 IgV

<400> 1141

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1142
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v185 IgV

<400> 1142

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Glu Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Ile Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1143
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v186 IgV

<400>  1143

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Val Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1144
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v187 IgV

<400> 1144

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Ile Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1145
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v188 IgV

<400> 1145

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Gly Glu Leu Ser Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Asn Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Val Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1146
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v189 IgV

<400> 1146

Val Ile His Val Thr Lys Glu Val Lys Glu Val Thr Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Asp Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Val Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Val His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1147
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v190 IgV

<400> 1147

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Leu Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser His Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1148
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v191 IgV

<400> 1148

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  1149
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v192 IgV

<400>  1149

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1150
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v193 IgV

<400> 1150

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1151
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v194 IgV

<400> 1151

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 1152
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v195 IgV

<400> 1152

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Met Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Leu Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Arg Trp Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 1153
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Knob Fc

<400> 1153

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15

Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80
```

```
Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg Glu Glu Met Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220

Ser Leu Ser Leu Ser Pro Gly Lys
225                 230
```

<210> 1154
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Hole Fc

<400> 1154

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                  10                  15

Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Cys Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val
            180                 185                 190
```

```
Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205


Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220


Ser Leu Ser Leu Ser Pro Gly Lys
225                 230


<210>  1155
<211>  232
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Stack Fc (homodimeric)

<400>  1155

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15


Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60


Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80


Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95
```

```
Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110


Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125


Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
    130                 135                 140


Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160


Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175


Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190


Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205


Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220


Ser Leu Ser Leu Ser Pro Gly Lys
225                 230


<210>  1156
<211>  8
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Stuffer

<400>  1156

His Met Ser Ser Val Ser Ala Gln
1               5
```

<210> 1157
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Fc (C5S (C220S), R77C, (R292C), N82G (N297G), V87C (V302C))

<400> 1157

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15


Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60


Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln
65                  70                  75                  80


Tyr Gly Ser Thr Tyr Arg Cys Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95


Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110


Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125


Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140
```

```
Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160


Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175


Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190


Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205


Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220


Ser Leu Ser Leu Ser Pro Gly Lys
225                 230


<210>  1158
<211>  232
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Fc with C220S/L234A/L235E/G237A

<400>  1158

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15


Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60
```

```
Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220

Ser Leu Ser Leu Ser Pro Gly Lys
225                 230
```

<210> 1159
<211> 231

<212> PRT
<213> Artificial Sequence

<220>
<223> Fc with C220S/E233P/L234V/L235A/G236del/S267K

<400> 1159

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                  10                  15


Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
            20                  25                  30


Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
        35                  40                  45


Asp Val Lys His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
    50                  55                  60


Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
65                  70                  75                  80


Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
                85                  90                  95


Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
            100                 105                 110


Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
        115                 120                 125


Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
    130                 135                 140


Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
145                 150                 155                 160
```

```
Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
                165                 170                 175


Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
            180                 185                 190


Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
        195                 200                 205


Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
    210                 215                 220


Leu Ser Leu Ser Pro Gly Lys
225                 230


<210>  1160
<211>  431
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  antiCD19z chimeric antigen receptor

<400>  1160

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1               5                   10                  15


Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20                  25                  30


Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35                  40                  45


Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60


Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65                  70                  75                  80
```

```
Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
            100                 105                 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
        115                 120                 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
    130                 135                 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
    210                 215                 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225                 230                 235                 240

Val Thr Val Ser Ser Ala Ala Ala Lys Pro Thr Thr Thr Pro Ala Pro
                245                 250                 255

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
            260                 265                 270
```

```
Arg Pro Glu Ala Ser Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
        275                 280                 285


Gly Leu Asp Phe Ala Ser Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
    290                 295                 300


Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Arg
305                 310                 315                 320


Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln
                325                 330                 335


Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp
            340                 345                 350


Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro
        355                 360                 365


Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp
    370                 375                 380


Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg
385                 390                 395                 400


Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr
                405                 410                 415


Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            420                 425                 430


<210>  1161
<211>  21
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> CD8-derived signal sequence

<400> 1161

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1   5   10   15

His Ala Ala Arg Pro
            20

<210> 1162
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8-derived signal sequence

<400> 1162

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1   5   10   15

His Ala Ala Arg Pro Gly Ser
            20

<210> 1163
<211> 245
<212> PRT
<213> Artificial Sequence

<220>
<223> anti-CD19 scFv

<400> 1163

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1   5   10   15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20   25   30

```
Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35                  40                  45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65                  70                  75                  80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
            100                 105                 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
        115                 120                 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
    130                 135                 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
    210                 215                 220
```

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225 230 235 240

Val Thr Val Ser Ser
245

<210> 1164
<211> 69
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8-derived hinge and transmembrane domain

<400> 1164

Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
1 5 10 15

Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
20 25 30

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40 45

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
50 55 60

Ser Leu Val Ile Thr
65

<210> 1165
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> 4-1BB-derived costimulatory domain

<400> 1165

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
1 5 10 15

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
20 25 30

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
35 40

<210> 1166
<211> 40
<212> PRT
<213> Artificial Sequence

<220>
<223> CD28-derived costimulatory domain

<400> 1166

Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro
1 5 10 15

Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro
20 25 30

Arg Asp Phe Ala Ala Tyr Arg Ser
35 40

<210> 1167
<211> 41
<212> PRT
<213> Artificial Sequence

<220>
<223> CD28-derived costimulatory domain

<400> 1167

Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr
1 5 10 15

Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro
20 25 30

Pro Arg Asp Phe Ala Ala Tyr Arg Ser
35 40

<210> 1168
<211> 44
<212> PRT
<213> Artificial Sequence

<220>
<223> CD28-derived costimulatory domain

<400> 1168

Phe Trp Val Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met
1 5 10 15

Asn Met Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro
20 25 30

Tyr Ala Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser
35 40

<210> 1169
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> T2A protein

<400> 1169

Ser Gly Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu
1 5 10 15

Asn Pro Gly Pro
20

<210> 1170
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Blue fluorescent protein

<400> 1170

Ser Glu Leu Ile Lys Glu Asn Met His Met Lys Leu Tyr Met Glu Gly
1 5 10 15

Thr Val Asp Asn His His Phe Lys Cys Thr Ser Glu Gly Glu Gly Lys
20 25 30

Pro Tyr Glu Gly Thr Gln Thr Met Arg Ile Lys Val Val Glu Gly Gly
35 40 45

Pro Leu Pro Phe Ala Phe Asp Ile Leu Ala Thr Ser Phe Leu Tyr Gly
50 55 60

Ser Lys Thr Phe Ile Asn His Thr Gln Gly Ile Pro Asp Phe Phe Lys
65 70 75 80

Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Val Thr Thr Tyr Glu
85 90 95

Asp Gly Gly Val Leu Thr Ala Thr Gln Asp Thr Ser Leu Gln Asp Gly
100 105 110

Cys Leu Ile Tyr Asn Val Lys Ile Arg Gly Val Asn Phe Thr Ser Asn
115 120 125

Gly Pro Val Met Gln Lys Lys Thr Leu Gly Trp Glu Ala Phe Thr Glu
130 135 140

Thr Leu Tyr Pro Ala Asp Gly Gly Leu Glu Gly Arg Asn Asp Met Ala
145 150 155 160

```
Leu Lys Leu Val Gly Gly Ser His Leu Ile Ala Asn Ile Lys Thr Thr
                165                 170                 175


Tyr Arg Ser Lys Lys Pro Ala Lys Asn Leu Lys Met Pro Gly Val Tyr
            180                 185                 190


Tyr Val Asp Tyr Arg Leu Glu Arg Ile Lys Glu Ala Asn Asn Glu Thr
        195                 200                 205


Tyr Val Glu Gln His Glu Val Ala Val Ala Arg Tyr Cys Asp Leu Pro
    210                 215                 220


Ser Lys Leu Gly His Lys Leu Asn
225                 230


<210>  1171
<211>  472
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  2nd Gen CAR

<400>  1171

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1               5                   10                  15


Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20                  25                  30


Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35                  40                  45


Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60
```

```
Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65                  70                  75                  80


Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85                  90                  95


Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
            100                 105                 110


Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
        115                 120                 125


Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
    130                 135                 140


Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160


Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175


Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190


Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205


Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
    210                 215                 220


Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225                 230                 235                 240


Val Thr Val Ser Ser Ala Ser Ala Lys Pro Thr Thr Thr Pro Ala Pro
                245                 250                 255
```

```
Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
            260                 265                 270

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
        275                 280                 285

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
    290                 295                 300

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Met His Lys Arg
305                 310                 315                 320

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
                325                 330                 335

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
            340                 345                 350

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
        355                 360                 365

Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
    370                 375                 380

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
385                 390                 395                 400

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
                405                 410                 415

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
            420                 425                 430

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
        435                 440                 445
```

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
450 455 460

His Met Gln Ala Leu Pro Pro Arg
465 470

<210> 1172
<211> 497
<212> PRT
<213> Artificial Sequence

<220>
<223> 2nd Gen CAR

<400> 1172

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
100 105 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
115 120 125

```
Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
    130                 135                 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
    210                 215                 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225                 230                 235                 240

Val Thr Val Ser Ser Ala Ser Ala Lys Pro Thr Thr Thr Pro Ala Pro
                245                 250                 255

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
            260                 265                 270

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
        275                 280                 285

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
    290                 295                 300

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Met His Lys Arg
305                 310                 315                 320
```

```
Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
                325                 330                 335

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
            340                 345                 350

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
        355                 360                 365

Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
    370                 375                 380

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
385                 390                 395                 400

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
                405                 410                 415

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
            420                 425                 430

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
        435                 440                 445

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
    450                 455                 460

His Met Gln Ala Leu Pro Pro Arg Gly Gly Arg Ser Gly Glu Gly Arg
465                 470                 475                 480

Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro Gly Pro Ser
                485                 490                 495

Arg
```

<210> 1173
<211> 471
<212> PRT
<213> Artificial Sequence

<220>
<223> 2nd Gen CAR with CD28-derived costimulatory domain

<400> 1173

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
100 105 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
115 120 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
130 135 140

```
Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160


Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175


Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190


Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205


Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
    210                 215                 220


Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225                 230                 235                 240


Val Thr Val Ser Ser Ala Ser Ala Lys Pro Thr Thr Thr Pro Ala Pro
                245                 250                 255


Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
            260                 265                 270


Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
        275                 280                 285


Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
    290                 295                 300


Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Met His Arg Ser
305                 310                 315                 320


Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro Arg
                325                 330                 335
```

```
Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro Arg
            340                 345                 350

Asp Phe Ala Ala Tyr Arg Ser Arg Val Lys Phe Ser Arg Ser Ala Asp
        355                 360                 365

Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
    370                 375                 380

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
385                 390                 395                 400

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
                405                 410                 415

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
            420                 425                 430

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
        435                 440                 445

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
    450                 455                 460

Met Gln Ala Leu Pro Pro Arg
465                 470
```

<210> 1174
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<223> Anti-CD19 scFv

<400> 1174

```
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1               5                   10                  15
```

```
Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20                  25                  30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35                  40                  45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65                  70                  75                  80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
            100                 105                 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
        115                 120                 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
    130                 135                 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205
```

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
210 215 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225 230 235 240

Val Thr Val Ser Ser Ala Ala Ala
245

<210> 1175
<211> 1356
<212> DNA
<213> Artificial Sequence

<220>
<223> antiCD19x8z chimeric antigen receptor nucleotide

<400> 1175
atggccttac cagtgaccgc cttgctcctg ccgctggcct tgctgctcca cgccgccagg 60

ccggacatcc agatgacaca gactacatcc tccctgtctg cctctctggg agacagagtc 120

accatcagtt gcagggcaag tcaggacatt agtaaatatt taaattggta tcagcagaaa 180

ccagatggaa ctgttaaact cctgatctac catacatcaa gattacactc aggagtccca 240

tcaaggttca gtggcagtgg gtctggaaca gattattctc tcaccattag caacctggag 300

caagaagata ttgccactta cttttgccaa cagggtaata cgcttccgta cacgttcgga 360

gggggggacta agttggaaat aacaggctcc acctctggat ccggcaagcc cggatctggc 420

gagggatcca ccaagggcga ggtgaaactg caggagtcag gacctggcct ggtggcgccc 480

tcacagagcc tgtccgtcac atgcactgtc tcaggggtct cattacccga ctatggtgta 540

agctggattc gccagcctcc acgaaagggt ctggagtggc tgggagtaat atggggtagt 600

gaaaccacat actataattc agctctcaaa tccagactga ccatcatcaa ggacaactcc 660

aagagccaag ttttcttaaa aatgaacagt ctgcaaactg atgacacagc catttactac 720

tgtgccaaac attattacta cggtggtagc tatgctatgg actactgggg tcaaggaacc 780

tcagtcaccg tctcctcagc ggccgcaaag cccaccacga cgccagcgcc gcgaccacca 840

acaccggcgc ccaccatcgc gtcgcagccc ctgtccctgc gcccagaggc gagccggcca 900

gcggcggggg gcgcagtgca cacgaggggg ctggacttcg ccagtgatat ctacatctgg 960

gcgcccctgg ccgggacttg tggggtcctt ctcctgtcac tggttatcac cctttactgc 1020

agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 1080

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 1140

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 1200

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 1260

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 1320

tacgacgccc ttcacatgca ggccctgccc cctcgc 1356

<210> 1176
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> T2A Nucleotide

<400> 1176
ggcagtggcg agggcagagg aagtctgcta acatgcggtg acgtcgagga gaatcctggc 60

cca 63

<210> 1177
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> T2A Protein

<400> 1177

Gly Ser Gly Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu
1 5 10 15

Glu Asn Pro Gly Pro
            20

<210> 1178
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v1 ECD

<400> 1178

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1   5   10   15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Val Ala Ile
            20   25   30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35   40   45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Val Pro Leu Ala Pro
    50   55   60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65   70   75   80

Arg Gly His Asp Ala Gly Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85   90   95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
            100   105   110

His Pro Gln Leu Gly
        115

<210> 1179
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v2 ECD

<400> 1179

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1 5 10 15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Val Ala Ile
20 25 30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
35 40 45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Ser
50 55 60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65 70 75 80

Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
85 90 95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
100 105 110

His Pro Gln Leu Gly
115

<210> 1180
<211> 117
<212> PRT
<213> Artificial Sequence

<220>

<223> NKp30 v3 ECD

<400> 1180

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1 5 10 15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
20 25 30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
35 40 45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Val Pro Leu Ala Ser
50 55 60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65 70 75 80

Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
85 90 95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
100 105 110

His Pro Gln Leu Gly
115

<210> 1181
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v4 ECD

<400> 1181

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1 5 10 15

```
Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
            20                  25                  30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35                  40                  45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Pro
    50                  55                  60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65                  70                  75                  80

Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85                  90                  95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
            100                 105                 110

His Pro Gln Leu Gly
        115


<210>  1182
<211>  117
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  NKp30 v5 ECD

<400>  1182

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1               5                   10                  15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
            20                  25                  30
```

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35   40   45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Ser
    50   55   60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65   70   75   80

Arg Gly His Asp Ala Gly Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85   90   95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
            100   105   110

His Pro Gln Leu Gly
        115

<210> 1183
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 WT IgC-like

<400> 1183

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1   5   10   15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
            20   25   30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35   40   45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Ser
    50   55   60

```
Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65                  70                  75                  80


Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85                  90                  95


Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val
            100                 105


<210>  1184
<211>  108
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  NKp30 v1 IgC-like

<400>  1184

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1               5                   10                  15


Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Val Ala Ile
            20                  25                  30


Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35                  40                  45


Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Val Pro Leu Ala Pro
    50                  55                  60


Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65                  70                  75                  80


Arg Gly His Asp Ala Gly Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85                  90                  95
```

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val
100 105

<210> 1185
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v2 IgC-like

<400> 1185

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1 5 10 15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Val Ala Ile
20 25 30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
35 40 45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Ser
50 55 60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65 70 75 80

Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
85 90 95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val
100 105

<210> 1186
<211> 108
<212> PRT
<213> Artificial Sequence

<220>

<223> NKp30 v3 IgC-like

<400> 1186

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1 5 10 15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
20 25 30

Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
35 40 45

Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Val Pro Leu Ala Ser
50 55 60

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65 70 75 80

Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
85 90 95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val
100 105

<210> 1187
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v4 IgC-like

<400> 1187

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1 5 10 15

Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
20 25 30

```
Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35                  40                  45


Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Pro
    50                  55                  60


Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65                  70                  75                  80


Arg Gly His Asp Ala Ser Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85                  90                  95


Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val
            100                 105


<210>  1188
<211>  108
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  NKp30 v5 IgC-like

<400>  1188

Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1               5                   10                  15


Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Leu Ala Ile
            20                  25                  30


Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35                  40                  45


Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Ala Pro Leu Ala Ser
    50                  55                  60
```

Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65 70 75 80

Arg Gly His Asp Ala Gly Ile Tyr Val Cys Arg Val Glu Val Leu Gly
85 90 95

Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val
100 105

<210> 1189
<211> 270
<212> PRT
<213> Artificial Sequence

<220>
<223> Nkp30 stack

<400> 1189

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly Ser Gly
        115                 120                 125


Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Trp Val Ser Gln Pro Pro
    130                 135                 140


Glu Ile Arg Thr Leu Glu Gly Ser Ser Ala Phe Leu Pro Cys Ser Phe
145                 150                 155                 160


Asn Ala Ser Gln Gly Arg Val Ala Ile Gly Ser Val Thr Trp Phe Arg
                165                 170                 175


Asp Glu Val Val Pro Gly Lys Glu Val Arg Asn Gly Thr Pro Glu Phe
            180                 185                 190


Arg Gly Arg Leu Val Pro Leu Ala Pro Ser Arg Phe Leu His Asp His
        195                 200                 205


Gln Ala Glu Leu His Ile Arg Asp Val Arg Gly His Asp Ala Gly Ile
    210                 215                 220


Tyr Val Cys Arg Val Glu Val Leu Gly Leu Gly Val Gly Thr Gly Asn
225                 230                 235                 240


Gly Thr Arg Leu Val Val Glu Lys Glu His Pro Gln Leu Gly Gly Gly
                245                 250                 255


Gly Gly Ser Gly Gly Gly Gly Ser Ala Ala Ala Glu Pro Lys
            260                 265                 270


<210>  1190
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> NKp30 v1 IgC-like (long)

<400> 1190

```
Leu Trp Val Ser Gln Pro Pro Glu Ile Arg Thr Leu Glu Gly Ser Ser
1               5                  10                  15


Ala Phe Leu Pro Cys Ser Phe Asn Ala Ser Gln Gly Arg Val Ala Ile
            20                  25                  30


Gly Ser Val Thr Trp Phe Arg Asp Glu Val Val Pro Gly Lys Glu Val
        35                  40                  45


Arg Asn Gly Thr Pro Glu Phe Arg Gly Arg Leu Val Pro Leu Ala Pro
    50                  55                  60


Ser Arg Phe Leu His Asp His Gln Ala Glu Leu His Ile Arg Asp Val
65                  70                  75                  80


Arg Gly His Asp Ala Gly Ile Tyr Val Cys Arg Val Glu Val Leu Gly
                85                  90                  95


Leu Gly Val Gly Thr Gly Asn Gly Thr Arg Leu Val Val Glu Lys Glu
            100                 105                 110


His Pro Gln Leu
        115
```

<210> 1191
<211> 224
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v1 ECD

<400> 1191

```
Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1               5                  10                  15
```

```
Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20                  25                  30

Phe Trp His Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile Leu His Lys Lys Pro Thr Gly
                85                  90                  95

Met Ile Arg Ile His His Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110

Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125

Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro Lys
    130                 135                 140

Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr Asp
145                 150                 155                 160

Gly Val Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp Val
                165                 170                 175

Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met Thr
            180                 185                 190

Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg Leu Leu Ser Ser Pro
        195                 200                 205
```

```
Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro Pro Pro Asp His Ile Pro
    210                 215                 220


<210>  1192
<211>  224
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD86 v2 ECD

<400>  1192

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1               5                   10                  15


Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20                  25                  30


Phe Trp His Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45


Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60


Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80


Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95


Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110


Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125
```

Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro Lys
130 135 140

Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr Asp
145 150 155 160

Gly Val Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp Val
165 170 175

Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met Thr
180 185 190

Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg Leu Leu Ser Ser Pro
195 200 205

Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro Pro Pro Asp His Ile Pro
210 215 220

<210> 1193
<211> 224
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v3 ECD

<400> 1193

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1 5 10 15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
20 25 30

Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
35 40 45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
50 55 60

```
Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile Leu His Lys Lys Pro Thr Gly
                85                  90                  95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110

Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125

Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro Lys
    130                 135                 140

Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr Asp
145                 150                 155                 160

Gly Val Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp Val
                165                 170                 175

Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met Thr
            180                 185                 190

Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg Leu Leu Ser Ser Pro
        195                 200                 205

Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro Pro Pro Asp His Ile Pro
    210                 215                 220
```

<210> 1194
<211> 224
<212> PRT
<213> Artificial Sequence

<220>

<223> CD86 v4 ECD

<400> 1194

```
Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1               5                   10                  15


Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20                  25                  30


Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45


Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60


Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80


Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95


Met Ile Arg Ile His His Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110


Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125


Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro Lys
    130                 135                 140


Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr Asp
145                 150                 155                 160


Gly Val Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp Val
                165                 170                 175
```

```
Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met Thr
            180                 185                 190


Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg Leu Leu Ser Ser Pro
        195                 200                 205


Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro Pro Pro Asp His Ile Pro
    210                 215                 220


<210>  1195
<211>  108
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD86 WT IgV

<400>  1195

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1               5                   10                  15


Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20                  25                  30


Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45


Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60


Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80


Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95


Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser
            100                 105
```

<210> 1196
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v1 IgV

<400> 1196

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1   5   10   15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20   25   30

Phe Trp His Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35   40   45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50   55   60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65   70   75   80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile Leu His Lys Lys Pro Thr Gly
                85   90   95

Met Ile Arg Ile His His Met Asn Ser Glu Leu Ser
            100   105

<210> 1197
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v2 IgV

<400> 1197

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1 5 10 15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
20 25 30

Phe Trp His Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
35 40 45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
50 55 60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65 70 75 80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
85 90 95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser
100 105

<210> 1198
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v3 IgV

<400> 1198

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1 5 10 15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
20 25 30

Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
35 40 45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
50 55 60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65 70 75 80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile Leu His Lys Lys Pro Thr Gly
85 90 95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser
100 105

<210> 1199
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v4 IgV

<400> 1199

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1 5 10 15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
20 25 30

Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
35 40 45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
50 55 60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65 70 75 80

```
Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95


Met Ile Arg Ile His His Met Asn Ser Glu Leu Ser
            100                 105


<210>  1200
<211>  229
<212>  PRT
<213>  artificial sequence

<220>
<223>  IgG4 Fc

<400>  1200

Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe
1               5                   10                  15


Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
            20                  25                  30


Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
        35                  40                  45


Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
    50                  55                  60


Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65                  70                  75                  80


Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
                85                  90                  95


Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
            100                 105                 110
```

Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
        115   120   125

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
    130   135   140

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
145   150   155   160

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
                165   170   175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
            180   185   190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
        195   200   205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
    210   215   220

Leu Ser Leu Gly Lys
225

<210> 1201
<211> 229
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG4 Fc S228P

<400> 1201

Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
1   5   10   15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
            20   25   30

```
Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
        35                  40                  45

Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
    50                  55                  60

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65                  70                  75                  80

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
                85                  90                  95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
            100                 105                 110

Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
        115                 120                 125

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
    130                 135                 140

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
145                 150                 155                 160

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
                165                 170                 175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
            180                 185                 190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
        195                 200                 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
    210                 215                 220
```

Leu Ser Leu Gly Lys
225

<210> 1202
<211> 232
<212> PRT
<213> artificial Sequence

<220>
<223> IgG1 Fc C220S

<400> 1202

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1   5   10   15

Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20   25   30

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35   40   45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50   55   60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65   70   75   80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85   90   95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100   105   110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115   120   125

```
Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140


Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160


Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175


Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190


Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205


Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220


Ser Leu Ser Leu Ser Pro Gly Lys
225                 230


<210>  1203
<211>  98
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV

<400>  1203

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45
```

```
His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95

Leu Lys
```

<210> 1204
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v1

<400> 1204

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1205
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v2

<400> 1205

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asp Phe Asp Thr Gly Ser His Val Asn
20 25 30

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1206
<211> 201

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v3

<400> 1206

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160
```

```
Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1207
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v4

<400>  1207

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110
```

```
Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1208
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v5

<400>  1208

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1209
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v6

<400> 1209

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Gly Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190
```

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1210
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v7

<400> 1210

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1211
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v8

<400> 1211

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

```
Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1212
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v9

<400>  1212

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1213
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v10

<400> 1213

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

```
Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1214
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v11

<400>  1214

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Arg Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

```
Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1215
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v12

<400>  1215

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1216
<211> 201
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 ECD v13

<400> 1216

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175
```

```
Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1217
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v14

<400>  1217

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125
```

```
Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1218
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v15

<400>  1218

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1219
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v16

<400>  1219

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1220
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v17

<400> 1220

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Ser Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140
```

```
Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1221
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v18

<400>  1221

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

```
Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1222
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v19

<400>  1222

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1223
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v20

<400> 1223

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Arg Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175
```

```
Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1224
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v21

<400>  1224

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110
```

```
Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1225
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v22

<400>  1225

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1226
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v23

<400>  1226
```

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190
```

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1227
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v24

<400> 1227

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

```
Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1228
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v25

<400>  1228

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

```
Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1229
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v26

<400>  1229

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1230
<211> 201

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v27

<400> 1230

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160
```

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1231
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v28

<400> 1231

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

```
Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1232
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v29

<400>  1232

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1233
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v30

<400> 1233

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190
```

```
Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1234
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v31

<400>  1234

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125
```

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1235
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v32

<400> 1235

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

```
Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1236
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v33

<400>  1236

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1237
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v34

<400> 1237

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

```
Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1238
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v35

<400>  1238

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1239
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v36

<400> 1239

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asp
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1240
<211> 201
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 ECD v37

<400> 1240

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asp
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175
```

```
Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1241
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v38

<400>  1241

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125
```

```
Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1242
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v39

<400>  1242

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Ser Phe His Ile Pro His Val Arg Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1243
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v40

<400>  1243

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Val Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1244
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v41

<400> 1244

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140
```

```
Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1245
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v42

<400>  1245

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro His Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

```
Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1246
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v43

<400>  1246

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1247
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v44

<400> 1247

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175
```

```
Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1248
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v45

<400>  1248

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110
```

```
Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1249
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v46

<400>  1249

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1250
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v47

<400>  1250
```

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190
```

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1251
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v48

<400> 1251

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

```
Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1252
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v49

<400>  1252

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Met Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

```
Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1253
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v50

<400>  1253

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1254
<211> 201

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v51

<400> 1254

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Ala Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Ser Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160
```

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1255
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v52

<220>
<221> VARIANT
<222> (65)..(65)
<223> X is a stop codon

<400> 1255

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1 5 10 15

Ser Asn Val Ala Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Xaa Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1256
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v53

<400> 1256

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe Leu Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200

<210>  1257
<211>  201
```

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v54

<400> 1257

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe Leu Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160
```

```
Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1258
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v55

<400>  1258

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Val Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110
```

```
Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1259
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v56

<400>  1259

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asn Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1260
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v57

<400> 1260

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190
```

```
Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1261
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v58

<400>  1261

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125
```

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1262
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v59

<400> 1262

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asp Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

```
Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1263
<211>  102
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  PD-L2 IgV wildtype

<400>  1263

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1264
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v61

<400>  1264

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Val Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1265
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v62

<400> 1265

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190
```

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1266
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v63

<400> 1266

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Pro Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Ser Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

```
Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1267
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v64

<400> 1267

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80
```

```
Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1268
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v65

<400>  1268

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1269
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v66

<400> 1269

```
Leu Leu Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Glu Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160
```

```
Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1270
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v67

<400>  1270

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Phe Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1271
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v68

<400> 1271

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

```
Pro His Arg Glu Arg Ala Thr Leu Leu Gly Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1272
<211> 201
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 ECD v69

<400> 1272

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Ser Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175
```

```
Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1273
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v70

<400>  1273

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Val Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125
```

```
Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1274
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v71

<400>  1274

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asp Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Ser Phe His Ile Pro His Ala Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1275
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v72

<400>  1275

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Ala Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Cys
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1276
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v73

<400> 1276

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


His Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140
```

```
Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1277
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v74

<400>  1277

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

```
Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175


Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1278
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v75

<400>  1278

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Gly Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190

Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200
```

<210> 1279
<211> 201
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 ECD v76

<400> 1279

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110


Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
        115                 120                 125


Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
    130                 135                 140


Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145                 150                 155                 160


Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
                165                 170                 175
```

```
Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
            180                 185                 190


Gln Met Glu Pro Arg Thr His Pro Thr
        195                 200


<210>  1280
<211>  201
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 ECD v77

<400>  1280

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
            100                 105                 110
```

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn
130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val
145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser
180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr
195 200

<210> 1281
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v1

<400> 1281

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1282
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v2

<400> 1282

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asp Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1283
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v3

<400> 1283

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1284
<211> 98
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 IgV v4

<400> 1284

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1285
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v5

<400> 1285

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1286
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v6

<400> 1286

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Gly Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1287
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v7

<400> 1287

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1288
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v8

<400> 1288

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1289
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v9

<400> 1289

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1290
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v10

<400> 1290

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1291
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v11

<400> 1291

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

```
Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys



<210>  1292
<211>  98
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v12

<400>  1292

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1               5                  10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Ser Phe His Ile Pro His Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys
```

<210> 1293
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v13

<400> 1293

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1294
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v14

<400> 1294

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1295
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v15

<400> 1295

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

```
His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80

Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95

Leu Lys
```

<210> 1296
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v16

<400> 1296

```
Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1               5                   10                  15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80
```

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1297
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v17

<400> 1297

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Ser Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1298
<211> 98

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v18

<400> 1298

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1299
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v19

<400> 1299

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

```
Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65                  70                  75                  80


Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys



<210>  1300
<211>  98
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v20

<400>  1300

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
        35                  40                  45
```

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Arg Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1301
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v21

<400> 1301

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1302
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v22

<400> 1302

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1303
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v23

<400> 1303

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1304
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v24

<400> 1304

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1305
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v25

<400> 1305

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

```
Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys



<210>  1306
<211>  98
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v26

<400>  1306

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95
```

Leu Lys

<210> 1307
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v27

<400> 1307

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1308
<211> 98
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 IgV v28

<400> 1308

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1309
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v29

<400> 1309

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1310
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v30

<400> 1310

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1311
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v31

<400> 1311

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1312
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v32

<400> 1312

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1313
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v33

<400> 1313

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1314
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v34

<400> 1314

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1315
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v35

<400> 1315

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

```
Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys
```

<210> 1316
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v36

<400> 1316

```
Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asp Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys
```

<210> 1317
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v37

<400> 1317

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asp Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1318
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v38

<400> 1318

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1319
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v39

<400> 1319

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro His Val Arg Val Gly Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1320
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v40

<400> 1320

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Val Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1321
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v41

<400> 1321

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1322
<211> 98

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v42

<400> 1322

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro His Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1323
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v43

<400> 1323

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1324
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v44

<400> 1324

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

```
His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95

Leu Lys
```

<210> 1325
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v45

<400> 1325

```
Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1               5                   10                  15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80

Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95
```

Leu Lys

<210> 1326
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v46

<400> 1326

```
Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95
```

Leu Lys

<210> 1327
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v47

<400> 1327

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1328
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v48

<400> 1328

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1   5   10   15

```
Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95

Leu Lys
```

<210> 1329
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v49

<400> 1329

```
Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1               5                   10                  15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Met Asn Leu
            20                  25                  30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60
```

```
Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys



<210>  1330
<211>  98
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v50

<400>  1330

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95
```

Leu Lys

<210> 1331
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v51

<400> 1331

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Ala Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Ser Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1332
<211> 98
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 IgV v52

<220>
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<222> (64)..(64)
<223> X is a stop codon

<400> 1332

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly Ser
1   5   10   15

Asn Val Ala Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Xaa
    50   55   60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1333
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v53

<400> 1333

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50 55 60

Ala Ser Phe Leu Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85 90 95

Leu Lys

<210> 1334
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v54

<400> 1334

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35 40 45

```
His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe Leu Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65                  70                  75                  80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95

Leu Lys
```

<210> 1335
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v55

<400> 1335

```
Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Val Val Glu Gln Gly Ser
1               5                   10                  15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35                  40                  45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80
```

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1336
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v56

<400> 1336

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asn Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1337
<211> 98

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v57

<400> 1337

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1338
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v58

<400> 1338

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

```
Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys



<210>  1339
<211>  98
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v60

<400>  1339

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asp Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35                  40                  45
```

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1340
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v61

<400> 1340

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Val Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1341
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v62

<400> 1341

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1342
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v63

<400> 1342

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Pro
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Leu Phe His Ile Ser Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1343
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v64

<400> 1343

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65   70   75   80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1344
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v65

<400> 1344

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

```
Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys



<210>  1345
<211>  98
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v66

<400>  1345

Leu Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Glu Ala Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95
```

Leu Lys

<210> 1346
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v67

<400> 1346

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Phe
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1347
<211> 98
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 IgV v68

<400> 1347

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Gly Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1348
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v69

<400> 1348

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Ser Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1349
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v70

<400> 1349

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Val Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1350
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v71

<400> 1350

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asp Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro His Ala Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1351
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v72

<400> 1351

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1   5   10   15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20   25   30

Gly Ala Ile Ala Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Cys Pro
        35   40   45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50   55   60

Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
65   70   75   80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85   90   95

Leu Lys

<210> 1352
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v73

<400> 1352

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn His
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1353
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v74

<400> 1353

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1354
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v75

<400> 1354

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Ser Phe His Ile Pro His Val Gln Gly Gly Asp Glu Gly Gln Tyr
65 70 75 80

```
Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys
```

<210> 1355
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v76

<400> 1355

```
Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser
1               5                   10                  15


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
            20                  25                  30


Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
        35                  40                  45


His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
    50                  55                  60


Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln Tyr
65                  70                  75                  80


Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
                85                  90                  95


Leu Lys
```

<210> 1356
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v77

<400> 1356

Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly Ser
1 5 10 15

Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
20 25 30

Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro
35 40 45

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
50 55 60

Ala Leu Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln Tyr
65 70 75 80

Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr
85 90 95

Leu Lys

<210> 1357
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v1

<400> 1357

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1358
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v2

<400> 1358

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asp Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1359
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v3

<400> 1359

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1360
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v4

<400> 1360

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1361
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v5

<400> 1361

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1362
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v6

<400> 1362

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Gly Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1363
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v7

<400>  1363

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1364
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v8

<400> 1364

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala
            100

<210> 1365
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v9

<400> 1365

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1   5   10   15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20   25   30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65   70   75   80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85   90   95

Thr Leu Lys Val Lys Ala
            100

<210> 1366
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v10

<400> 1366

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1   5   10   15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20   25   30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65   70   75   80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85   90   95

Thr Leu Lys Val Lys Ala
            100

<210> 1367
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v11

<400> 1367

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1   5   10   15

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Arg Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1368
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v12

<400> 1368

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Ser Phe His Ile Pro His Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1369
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v13

<400>  1369

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala
100

<210> 1370
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v14

<400> 1370

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1371
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 IgV v15

<400> 1371

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1372
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v16

<400> 1372

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1373
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v17

<400> 1373

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Ser Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1374
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v18

<400> 1374

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1375
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v19

<400> 1375

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1   5   10   15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20   25   30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65   70   75   80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85   90   95

Thr Leu Lys Val Lys Ala
            100

<210> 1376
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v20

<400> 1376

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Arg Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1377
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v21

<400> 1377

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65   70   75   80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85   90   95

Thr Leu Lys Val Lys Ala
            100

<210> 1378
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v22

<400> 1378

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1   5   10   15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20   25   30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65   70   75   80

```
Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1379
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v23

<400>  1379

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1380
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v24

<400> 1380

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1381
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v25

<400> 1381

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1382
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v26

<400> 1382

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1383
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v27

<400> 1383

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80
```

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1384
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v28

<400> 1384

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1385
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v29

<400> 1385

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1386
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v30

<400> 1386

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1387
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v31

<400>  1387

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1388
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v32

<400> 1388

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala
100

<210> 1389
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v33

<400> 1389

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1390
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v34

<400> 1390

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Phe Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1391
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v35

<400> 1391

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1392
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v36

<400> 1392

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asp
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1393
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v37

<400>  1393

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asp
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala
100

<210> 1394
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v38

<400> 1394

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1395
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 IgV v39

<400> 1395

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro His Val Arg Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1396
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v40

<400> 1396

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Val Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1397
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v41

<400> 1397

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1398
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v42

<400> 1398

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro His Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1399
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v43

<400> 1399

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1   5   10   15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20   25   30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65   70   75   80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85   90   95

Thr Leu Lys Val Lys Ala
            100

<210> 1400
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v44

<400> 1400

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1401
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v45

<400> 1401

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1402
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v46

<400> 1402

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

```
Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1403
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v47

<400>  1403

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1404
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v48

<400> 1404

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1405
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v49

<400> 1405

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Met Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1406
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v50

<400> 1406

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1407
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v51

<400> 1407

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Ala Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Ser Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1408
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v52

<220>
<221> VARIANT
<222> (65)..(65)
<223> X is a stop codon

<400> 1408

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu His Gly
1 5 10 15

Ser Asn Val Ala Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Xaa Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1409
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v53

<400> 1409

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe Leu Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1410
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L2 IgV v54

<400> 1410

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe Leu Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1411
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v55

<400> 1411

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Val Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100


<210>  1412
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v56

<400>  1412

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asn Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1413
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v57

<400> 1413

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1414
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v58

<400> 1414

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1415
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v60

<400> 1415

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asp Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1416
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v61

<400> 1416

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Val Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1417
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v62

<400> 1417

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

```
Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1418
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v63

<400>  1418

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Pro Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Ser Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1419
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v64

<400> 1419

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1   5   10   15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20   25   30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65   70   75   80

Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85   90   95

Thr Leu Lys Val Lys Ala
            100

<210> 1420
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v65

<400> 1420

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1421
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v66

<400> 1421

Leu Leu Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Glu Ala Ser
35 40 45

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1422
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v67

<400> 1422

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Phe Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1423
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v68

<400> 1423

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Gly Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1424
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v69

<400> 1424

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Ser Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala
100

<210> 1425
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v70

<400> 1425

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1 5 10 15

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Val Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1426
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v71

<400>  1426

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asp Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45
```

```
Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Ala Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Gln Cys Ile Ile Thr Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1427
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v72

<400> 1427

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Ala Ala Ser Leu Gln Lys Val Asp Asn Asp Thr Cys
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala
            100

<210> 1428
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v73

<400> 1428

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1   5   10   15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20   25   30

His Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser
        35   40   45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50   55   60

Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65   70   75   80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85   90   95

Thr Leu Lys Val Lys Ala
            100

<210> 1429
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v74

<400> 1429

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Ser Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Gln Cys Ile Ile Thr Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100
```

<210> 1430
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v75

<400> 1430

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15
```

```
Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ile Leu Gln Lys Val Asp Asn Asp Thr Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Lys Ala Ser Phe His Ile Pro His Val Gln Gly Gly Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala
            100
```

<210> 1431
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 IgV v76

<400> 1431

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Lys Ala Leu Phe His Ile Pro Gln Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala
            100


<210>  1432
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 IgV v77

<400>  1432

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Val Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Lys Ala Leu Phe His Ile Pro His Val Gln Val Gly Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95
```

Thr Leu Lys Val Lys Ala
100

<210> 1433
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v89 ECD

<400> 1433

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1434
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v90 ECD

<400> 1434

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Met Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140
```

```
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1435
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v91 ECD

<400> 1435

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
130 135 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145 150 155 160

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1436
<211> 329

<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v92 ECD

<400> 1436

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                  10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160
```

```
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1437
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v93 ECD

<400> 1437

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Leu Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1438
<211> 329
<212> PRT
<213> Artificial sequence

<220>

<223> CD112 v94 ECD

<400> 1438

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175
```

```
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1439
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v95 ECD

<400> 1439

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Ala Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190
```

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1440
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v96 ECD

<400> 1440

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                  10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190
```

```
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1441
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v97 ECD

<400>  1441

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Pro Ala Lys Gln Ser
65                  70                  75                  80

Ile Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1442
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v98 ECD

<400> 1442

```
Gln Asp Val Arg Val Gln Val Leu Arg Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15
```

```
Gly Thr Val Glu Val Leu Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Met Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Phe Glu Arg Leu Ser Leu Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Val Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Ala Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205
```

```
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1443
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v99 ECD

<400>  1443

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30
```

```
His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1444
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v100 ECD

<400>  1444

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Ala Pro Gly Pro
            20                  25                  30
```

```
Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220
```

```
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1445
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v101 ECD

<400>  1445

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1446
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v102 ECD

<400>  1446

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240
```

```
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1447
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v103 ECD

<400>  1447

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1448
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v104 ECD

<400>  1448

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Leu Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255
```

```
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1449
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v105 ECD

<400>  1449

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Ala Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1450
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v106 ECD

<400>  1450

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Pro Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80
```

```
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270
```

```
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325
```

<210> 1451
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v107 ECD

<400> 1451

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Leu Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1452
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v108 ECD

<400>  1452

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Ser Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Leu Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285
```

```
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300


Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1453
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v109 ECD

<400>  1453

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Thr Ala Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125

Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

```
Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320


Thr Ala Gly Ala Gly Ala Thr Gly Gly
                325


<210>  1454
<211>  329
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v100 ECD

<400>  1454

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

```
Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val Ile
        115                 120                 125


Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140


Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160


Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175


Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190


Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205


Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220


Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240


Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255


Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270


Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285


Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300
```

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305 310 315 320

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 1455
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v111 ECD

<400> 1455

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Met Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Leu Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 1456
<211> 329
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v112 ECD

<400> 1456

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
115 120 125

```
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
    130                 135                 140

Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
145                 150                 155                 160

Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
                165                 170                 175

Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
            180                 185                 190

Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
        195                 200                 205

Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
    210                 215                 220

Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
225                 230                 235                 240

Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
                245                 250                 255

Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
            260                 265                 270

Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
        275                 280                 285

Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
    290                 295                 300

Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
305                 310                 315                 320
```

Thr Ala Gly Ala Gly Ala Thr Gly Gly
325

<210> 1457
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v89 IgV

<400> 1457

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1458
<211> 125

<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v90 IgV

<400> 1458

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Met Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1459
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v91 IgV

<400> 1459

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1460
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v92 IgV

<400> 1460

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100   105   110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 1461
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v93 IgV

<400> 1461

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Leu Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 1462
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v94 IgV

<400> 1462

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1463
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v95 IgV

<400> 1463

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Ala Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  1464
<211>  125
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v96 IgV

<400>  1464

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1465
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v97 IgV

<400> 1465

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Pro Ala Lys Gln Ser
65 70 75 80

Ile Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1466
<211> 125

<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v98 IgV

<400> 1466

Gln Asp Val Arg Val Gln Val Leu Arg Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Val Leu Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Met Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Phe Glu Arg Leu Ser Leu Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Val Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Ala
115 120 125

<210> 1467
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v99 IgV

<400> 1467

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1468
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v100 IgV

<400> 1468

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Ala Pro Gly Pro
            20   25   30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100   105   110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 1469
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v101 IgV

<400> 1469

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  1470
<211>  125
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v102 IgV

<400>  1470

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1471
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v103 IgV

<400> 1471

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115                 120                 125


<210>  1472
<211>  125
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v104 IgV

<400>  1472

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Leu Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1473
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v105 IgV

<400> 1473

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Ala Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1474
<211> 125

<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v106 IgV

<400> 1474

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Pro Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1475
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v107 IgV

<400> 1475

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Leu Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1476
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v108 IgV

<400> 1476

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Ser Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Leu Val
            100   105   110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu
        115   120   125

<210> 1477
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v109 IgV

<400> 1477

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Ala Arg Gly Met Thr Trp Leu
        115                 120                 125
```

<210> 1478
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v100 IgV

<400> 1478

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1479
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v111 IgV

<400> 1479

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Met Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Leu Leu
        115                 120                 125


<210>  1480
<211>  125
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v112 IgV

<400>  1480

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu
115 120 125

<210> 1481
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v89 IgV

<400> 1481

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1482
<211> 127

<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v90 IgV

<400> 1482

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Met Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1483
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v91 IgV

<400> 1483

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1484
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v92 IgV

<400> 1484

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65   70   75   80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100   105   110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 1485
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v93 IgV

<400> 1485

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Leu Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 1486
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v94 IgV

<400> 1486

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
100 105 110

Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1487
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v95 IgV

<400> 1487

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Ala Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  1488
<211>  127
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v96 IgV

<400>  1488

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1489
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v97 IgV

<400> 1489

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Pro Ala Lys Gln Ser
65 70 75 80

Ile Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Tyr Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1490
<211> 127

<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v98 IgV

<400> 1490

Gln Asp Val Arg Val Gln Val Leu Arg Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Val Leu Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

Tyr Met Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Phe Glu Arg Leu Ser Leu Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Val Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Ala Arg Val
115 120 125

<210> 1491
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v99 IgV

<400> 1491

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1492
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v100 IgV

<400> 1492

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

```
Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Ala Pro Gly Pro
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  1493
<211>  127
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v101 IgV

<400>  1493

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45
```

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Met Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 1494
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v102 IgV

<400> 1494

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Trp Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

```
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Arg Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  1495
<211>  127
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v103 IgV

<400>  1495

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Thr Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95
```

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125


<210>  1496
<211>  127
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v104 IgV

<400>  1496

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Leu Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1497
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v105 IgV

<400> 1497

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Ala Trp Gln Arg Pro Asp Ala Pro Thr Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1498
<211> 127

<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v106 IgV

<400> 1498

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Ser Val Pro Gly Leu
            20                  25                  30


His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Pro Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110


Thr Phe Pro Lys Gly Tyr Val Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 1499
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v107 IgV

<400> 1499

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Leu Asp Ala Pro Ala Lys His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Met Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1500
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v109 IgV

<400> 1500

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Lys His
        35   40   45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50   55   60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Ser Val Ser Ala Lys Gln Ser
65   70   75   80

Thr Gly Lys Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85   90   95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Leu Val
            100   105   110

Thr Phe Pro Lys Gly Thr Val Arg Gly Met Thr Trp Leu Arg Val
        115   120   125

<210> 1501
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v109 IgV

<400> 1501

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1   5   10   15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20   25   30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35   40   45

```
Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95

His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val
            100                 105                 110

Thr Phe Pro Lys Gly Thr Ala Arg Gly Met Thr Trp Leu Arg Val
        115                 120                 125
```

<210> 1502
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v100 IgV

<400> 1502

```
Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60
```

Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
100 105 110

Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1503
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> CD112 v111 IgV

<400> 1503

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1 5 10 15

Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
20 25 30

His Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
35 40 45

Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
50 55 60

Pro Met Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65 70 75 80

Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
85 90 95

```
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
            100                 105                 110


Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Leu Leu Arg Val
        115                 120                 125


<210>  1504
<211>  127
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CD112 v112 IgV

<400>  1504

Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly
1               5                   10                  15


Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu
            20                  25                  30


Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His
        35                  40                  45


Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
    50                  55                  60


Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
65                  70                  75                  80


Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
                85                  90                  95


His Gly Leu Thr Val Glu Asp Glu Gly Ile Tyr Thr Cys Glu Phe Val
            100                 105                 110
```

Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val
115 120 125

<210> 1505
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v120 IgV

<400> 1505

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Gly Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Ala Phe Pro Gln Gly Ser Trp Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1506
<211> 116

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v121 IgV

<400> 1506

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Gly Ala Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asp
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg Leu Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1507
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v122 IgV

<400> 1507

Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Arg Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Leu Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Lys Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1508
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v123 IgV

<400> 1508

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg Arg Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Asp Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Ala Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1509
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v124 IgV

<400> 1509

Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

```
Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  1510
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v125 IgV

<400>  1510

Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Arg Met Ala Val Phe His Pro Thr Lys Gly Pro Ser Tyr Ser
    50                  55                  60
```

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1511
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v126 IgV

<400> 1511

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

```
Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1512
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v127 IgV

<400>  1512

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110
```

Asp Ile Trp Leu
        115

<210> 1513
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v128 IgV

<400> 1513

Pro Gly Thr Gly Gly Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Ile Glu Ala Thr His Val Ser Gln Leu Thr Trp Ala Arg Gln Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Glu Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Met Phe Val Ala Phe Pro Gln Gly Ser Trp Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1514
<211> 116

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v129 IgV

<400> 1514

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Ser Phe Pro Gln Gly Ser Trp Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1515
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v130 IgV

<400> 1515

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ile Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1516
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v131 IgV

<400> 1516

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Asp Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Asp Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1517
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v132 IgV

<400> 1517

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Gly Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

```
Ser Arg Ser Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Asp Gly
                85                  90                  95

Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1518
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v133 IgV

<400> 1518

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Leu Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60
```

Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Ala Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1519
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v134 IgV

<400> 1519

Pro Gly Thr Gly Asp Ile Val Val Lys Ala Pro Thr Gln Val Phe Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

```
Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Arg Ile Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1520
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v135 IgV

<400>  1520

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110
```

Asp Ile Trp Leu
        115

<210> 1521
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v136 IgV

<400> 1521

Pro Gly Thr Gly Asp Ile Ile Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Ser Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Met Phe Val Thr Tyr Pro Gln Arg Val Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1522
<211> 116

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v137 IgV

<400> 1522

Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln Val Leu Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Ile Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Ser Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1523
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v138 IgV

<400> 1523

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Cys Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1524
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v139 IgV

<400> 1524

Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

```
Phe Leu Gly Gly Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115


<210>  1525
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v140 IgV

<400>  1525

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45
```

```
Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Leu Ser Gly Leu Arg Ala Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1526
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v141 IgV

<400> 1526

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Glu
    50                  55                  60
```

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly Thr Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1527
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v142 IgV

<400> 1527

Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

```
Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1528
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v120 IgV

<400>  1528

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Gly Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Ala Phe Pro Gln Gly Ser
            100                 105                 110
```

Trp Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1529
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v121 IgV

<400> 1529

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Thr Gly Phe Leu Gly Gly Ala Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asp Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

Leu Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1530
<211> 122

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v122 IgV

<400> 1530

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Arg Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Leu Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Lys Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1531
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v123 IgV

<400> 1531

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Asp Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Ala Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1532
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v124 IgV

<400> 1532

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1533
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v125 IgV

<400> 1533

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

```
His Gly Glu Ser Gly Arg Met Ala Val Phe His Pro Thr Lys Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1534
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v126 IgV

<400> 1534

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1535
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v127 IgV

<400>  1535

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1536
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v128 IgV

<400>  1536

Trp Pro Pro Pro Gly Thr Gly Gly Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Ile Glu Ala Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


Gln Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Glu Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Ala Phe Pro Gln Gly Ser
            100                 105                 110
```

Trp Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1537
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v129 IgV

<400> 1537

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Ser Phe Pro Gln Gly Ser
            100   105   110

Trp Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1538
<211> 122

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v130 IgV

<400> 1538

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ile Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1539
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v131 IgV

<400> 1539

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Asp Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Asp Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1540
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v132 IgV

<400> 1540

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Gly Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Arg Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Asp Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1541
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v133 IgV

<400> 1541

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Ala Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1542
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v134 IgV

<400>  1542

Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Lys Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Arg Ile
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1543
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v135 IgV

<400>  1543

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1544
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v136 IgV

<400>  1544

Trp Pro Pro Pro Gly Thr Gly Asp Ile Ile Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Ser Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Tyr Pro Gln Arg Val
            100                 105                 110
```

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1545
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v137 IgV

<400> 1545

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Ile Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Ser Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1546
<211> 122

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v138 IgV

<400> 1546

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Cys Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1547
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v139 IgV

<400> 1547

Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Gly Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1548
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v140 IgV

<400> 1548

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Leu Ser Gly Leu Arg Ala Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1549
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v141 IgV

<400> 1549

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ala Tyr Glu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly
65                  70                  75                  80

Thr Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1550
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v142 IgV

<400> 1550

```
Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1551
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v120 ECD

<400> 1551

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Gly Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Ala Phe Pro Gln Gly Ser
            100                 105                 110

Trp Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

```
Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1552
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v121 ECD

<400> 1552

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Gly Ala Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asp Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

Leu Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1553
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v122 ECD

<400> 1553

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Arg Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Leu Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Lys Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1554
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v123 ECD

<400> 1554

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Asp Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Ala Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1555
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v124 ECD

<400> 1555

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 1556
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v125 ECD

<400> 1556

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Arg Met Ala Val Phe His Pro Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125
```

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 1557
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v126 ECD

<400> 1557

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1558
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v127 ECD

<400> 1558

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1559
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v128 ECD

<400> 1559

```
Trp Pro Pro Pro Gly Thr Gly Gly Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Ile Glu Ala Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


Gln Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Glu Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Ala Phe Pro Gln Gly Ser
            100                 105                 110


Trp Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1560
<211> 323

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v129 ECD

<400> 1560

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Ser Phe Pro Gln Gly Ser
            100                 105                 110


Trp Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1561
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v130 ECD

<400> 1561

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ile Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1562
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v131 ECD

<400> 1562

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Asp Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Asp Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1563
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v132 ECD

<400> 1563

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Gly Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Arg Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Asp Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1564
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v133 ECD

<400> 1564

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Ala Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1565
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v134 ECD

<400> 1565

```
Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Lys Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Arg Ile
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1566
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v135 ECD

<400> 1566

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1567
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v136 ECD

<400>  1567

Trp Pro Pro Pro Gly Thr Gly Asp Ile Ile Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Ser Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Tyr Pro Gln Arg Val
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1568
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v137 ECD

<400> 1568

```
Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Ile Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Ser Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1569
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v138 ECD

<400>  1569

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Cys Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Val Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1570
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v139 ECD

<400> 1570

```
Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Gly Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
245 250 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
260 265 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1571
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v140 ECD

<400> 1571

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Leu Ser Gly Leu Arg Ala Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1572
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v141 ECD

<400>  1572

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ala Tyr Glu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly
65                  70                  75                  80


Thr Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1573
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v142 ECD

<400>  1573

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275   280   285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290   295   300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305   310   315   320

Ser Arg Asn

<210> 1574
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v143 ECD

<400> 1574

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1575
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v143 IgV

<400> 1575

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Trp Tyr Ala
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95
```

```
Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1576
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v143 IgV

<400>  1576

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110
```

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1577
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v144 ECD

<400> 1577

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Thr Asp Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Asn Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Gln Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Tyr Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115   120   125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130   135   140

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1578
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v145 ECD

<400> 1578

```
Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Val Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Leu Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1579
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v146 ECD

<400> 1579

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr Gln Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Lys Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Val Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1580
<211> 323

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v147 ECD

<400> 1580

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Arg
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Gly Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Ala Phe Pro Gln Gly Ser
            100                 105                 110


Trp Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1581
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v148 ECD

<400> 1581

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val His Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Ser Ser Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Ala Phe His Gln Thr Arg Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1582
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v149 ECD

<400> 1582

```
Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Pro Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


Gln Gly Glu Ser Gly Ser Met Ala Val Tyr His Arg Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1583
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v150 ECD

<400> 1583

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Cys Ala Arg
        35                  40                  45


Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Thr Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Thr Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1584
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v151 ECD

<400> 1584

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Thr Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Gly Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Trp Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1585
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v152 ECD

<400>  1585

Trp Pro Pro Pro Gly Thr Gly Asp Val Phe Val Gln Ala Pro Ser Gln
1               5                   10                  15
```

```
Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Gln
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Met Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1586
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v153 ECD

<400> 1586

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Ser Gly Phe Met Gly Asp Ser Val Thr Leu Pro Cys Phe Leu Gln
            20                  25                  30

Val Pro Asp Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Trp Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Gly Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1587
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v154 ECD

<400>  1587

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Val Ser Gly Gly Met Ala Val Phe His Arg Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly
65                  70                  75                  80

Ala Gly Leu Arg Asn Ala Thr Leu Arg Ile Ser Arg Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1588
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v155 ECD

<400>  1588

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr His
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1589
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v156 ECD

<400>  1589

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Gly Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Arg Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Leu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Ala Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1590
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v157 ECD

<400> 1590

```
Trp Pro Pro Pro Gly Thr Gly Gly Ile Val Ala Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Ala Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Leu Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Ala Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
245 250 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
260 265 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
275 280 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1591
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v158 ECD

<400> 1591

Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Glu Arg
35 40 45

His Ser Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

```
Ser Tyr Ser Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1592
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v159 ECD

<400>  1592

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Pro Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1593
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v160 ECD

<400>  1593

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Ser His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Pro Gly Arg Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1594
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v161 ECD

<400>  1594

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asn Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Asn Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1595
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v162 ECD

<400> 1595

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Ser Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Val Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

```
Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1596
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v163 ECD

<400> 1596

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe Asn Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Ala Ala Ala Arg Pro Gly
65                  70                  75                  80

Thr Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1597
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v164 ECD

<400> 1597

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Arg Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Asp Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
100 105 110

```
Gly Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

```
Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1598
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v165 ECD

<400>  1598

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Lys Val Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110
```

```
Arg Thr Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1599
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v166 ECD

<400> 1599

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Leu Ala Val Phe His Gln Arg Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Ile Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
115 120 125

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 1600
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v167 ECD

<400> 1600

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ile Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Met Pro Phe Met Glu Val Ser His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Leu Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Ser Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125
```

```
Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320
```

Ser Arg Asn

<210> 1601
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v168 ECD

<400> 1601

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Glu Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Trp Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1602
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v169 ECD

<400> 1602

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Ile Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Val Arg
        35                  40                  45


His Gly Lys Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140
```

```
Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1603
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v170 ECD

<400> 1603

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Ala Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His His Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1604
<211> 323

<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v171 ECD

<400> 1604

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Gly Ser Val Thr Leu Pro Arg Tyr Leu Gln
            20                  25                  30


Val Pro Asp Met Gly Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60


Ala Tyr Gly Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Gly Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Arg Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160
```

```
Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1605
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v172 ECD

<400> 1605

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Glu Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Arg Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Thr Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1606
<211> 323
<212> PRT
<213> Artificial Sequence

<220>

<223> CD155 v173 ECD

<400> 1606

```
Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175
```

```
Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1607
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v174 ECD

<400> 1607

```
Trp Pro Pro Pro Gly Thr Gly Asp Ala Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Ser Leu Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1608
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v175 ECD

<400> 1608

```
Trp Pro Pro Pro Gly Thr Gly Glu Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Ala Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190
```

```
Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1609
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v176 ECD

<400> 1609

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Ala Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

Arg Gly Glu Ser Gly Cys Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Ser Gly
65                  70                  75                  80

Ala Glu Leu Arg Tyr Ala Ser Pro Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1610
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v177 ECD

<400> 1610

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Glu Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val His Gly Tyr Leu Gly Asp Ser Glu Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Ser Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205
```

```
Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1611
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v178 ECD

<400>  1611

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Ala Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Asp
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Ala Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1612
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v179 ECD

<400>  1612

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Arg Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220
```

```
Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1613
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v180 ECD

<400>  1613

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Met Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Ser Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Gly Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Met Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1614
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v181 ECD

<400> 1614

```
Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Tyr Gly Phe Leu Gly Asp Ser Ala Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Gly Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Val Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Thr Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Ile Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240
```

```
Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255


Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1615
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v182 ECD

<400> 1615

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Gly Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Gln Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1616
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v183 ECD

<400>  1616

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe Arg Gln Thr Gln Gly Pro
    50                  55                  60
```

```
Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Gly Ala Ser Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125


Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140


Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160


Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175


Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190


Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205


Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220


Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240


Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255
```

```
Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270


Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1617
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v184 ECD

<400>  1617

Trp Pro Pro Pro Gly Thr Gly Asp Ala Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Gly Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Arg Ile
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1618
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v185 ECD

<400>  1618

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ala Gly Ser Met Ala Ala Phe His Arg Thr Lys Gly Pro
    50                  55                  60


Cys Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Thr Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Tyr Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270
```

```
Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285


Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300


Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn
```

<210> 1619
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v186 ECD

<400> 1619

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asp Met Glu Val Thr His Val Ser Gln Leu Thr Trp Glu Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Asp Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Asn Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

```
Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320

Ser Arg Asn
```

<210> 1620
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v187 ECD

<400> 1620

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Ser Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Thr Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285
```

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
290 295 300

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1621
<211> 323
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v188 ECD

<400> 1621

Trp Pro Pro Pro Gly Thr Gly Asp Asp Val Met Leu Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Val Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Ile Ala Val Phe His Arg Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Gln Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
100 105 110

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

```
Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305                 310                 315                 320


Ser Arg Asn



<210>  1622
<211>  323
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v189 ECD

<400>  1622

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ser Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys His Leu Leu
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110
```

```
Arg Ser Val Asp Ile Trp Leu Arg Val Leu Ala Lys Pro Gln Asn Thr
        115                 120                 125

Ala Glu Val Gln Lys Val Gln Leu Thr Gly Glu Pro Val Pro Met Ala
    130                 135                 140

Arg Cys Val Ser Thr Gly Gly Arg Pro Pro Ala Gln Ile Thr Trp His
145                 150                 155                 160

Ser Asp Leu Gly Gly Met Pro Asn Thr Ser Gln Val Pro Gly Phe Leu
                165                 170                 175

Ser Gly Thr Val Thr Val Thr Ser Leu Trp Ile Leu Val Pro Ser Ser
            180                 185                 190

Gln Val Asp Gly Lys Asn Val Thr Cys Lys Val Glu His Glu Ser Phe
        195                 200                 205

Glu Lys Pro Gln Leu Leu Thr Val Asn Leu Thr Val Tyr Tyr Pro Pro
    210                 215                 220

Glu Val Ser Ile Ser Gly Tyr Asp Asn Asn Trp Tyr Leu Gly Gln Asn
225                 230                 235                 240

Glu Ala Thr Leu Thr Cys Asp Ala Arg Ser Asn Pro Glu Pro Thr Gly
                245                 250                 255

Tyr Asn Trp Ser Thr Thr Met Gly Pro Leu Pro Pro Phe Ala Val Ala
            260                 265                 270

Gln Gly Ala Gln Leu Leu Ile Arg Pro Val Asp Lys Pro Ile Asn Thr
        275                 280                 285

Thr Leu Ile Cys Asn Val Thr Asn Ala Leu Gly Ala Arg Gln Ala Glu
    290                 295                 300
```

Leu Thr Val Gln Val Lys Glu Gly Pro Pro Ser Glu His Ser Gly Ile
305 310 315 320

Ser Arg Asn

<210> 1623
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v144 IgV

<400> 1623

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Asp
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Asn Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Gln
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Met Tyr Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1624
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v145 IgV

<400> 1624

Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln Val Leu Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Val Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Leu Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Glu Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1625
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v146 IgV

<400> 1625

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr Gln Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Lys Lys Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Met Phe Val Val Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1626
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v147 IgV

<400> 1626

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Arg Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Gly Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Ala Phe Pro Gln Gly Ser Trp Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1627
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v148 IgV

<400>  1627

Pro Gly Thr Gly Asp Val Val Val His Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Ser Ser Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

```
Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Ala Phe His Gln Thr Arg Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1628
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v149 IgV

<400> 1628

```
Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15

Phe Leu Gly Asp Pro Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg Gln Gly Glu
        35                  40                  45
```

```
Ser Gly Ser Met Ala Val Tyr His Arg Thr Lys Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1629
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v150 IgV

<400> 1629

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Cys Ala Arg Arg Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Thr Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Thr Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1630
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v151 IgV

<400>  1630

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Thr Gln Leu Thr Trp Ala Arg His Gly Gly
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Trp Leu Arg Val Glu Asp Glu Gly
                85                  90                  95
```

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1631
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v152 IgV

<400> 1631

Pro Gly Thr Gly Asp Val Phe Val Gln Ala Pro Ser Gln Val Leu Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Gln His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Met
100 105 110

Asp Ile Trp Leu
115

<210> 1632
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v153 IgV

<400> 1632

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Met Gly Asp Ser Val Thr Leu Pro Cys Phe Leu Gln Val Pro Asp
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65   70   75   80

Trp Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Gly Ile Trp Leu
        115

<210> 1633
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v154 IgV

<400> 1633

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Val
        35                  40                  45


Ser Gly Gly Met Ala Val Phe His Arg Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly Ala Gly Leu
65                  70                  75                  80


Arg Asn Ala Thr Leu Arg Ile Ser Arg Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115
```

<210> 1634
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v155 IgV

<400> 1634

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr His Val Phe Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1635
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v156 IgV

<400>  1635

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Leu Gly Gly Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

```
Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Arg Thr Gln Gly Pro Ser Tyr Leu
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Ala
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1636
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v157 IgV

<400>  1636

Pro Gly Thr Gly Gly Ile Val Ala Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45
```

```
Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Ala Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Leu Phe Pro Gln Gly Ser Arg Ser Ala
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1637
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v158 IgV

<400> 1637

```
Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln Val Phe Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Glu Arg His Ser Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1638
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v159 IgV

<400>  1638

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Pro Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95
```

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1639
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v160 IgV

<400> 1639

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Ser His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Pro Gly Arg Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1640
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v161 IgV

<400> 1640

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1   5   10   15

Phe Leu Gly Asn Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Asn Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1641
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v162 IgV

<400> 1641

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Ser Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Val
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115
```

<210> 1642
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v163 IgV

<400> 1642

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe Asn Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Ala Ala Ala Arg Pro Gly Thr Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1643
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v164 IgV

<400> 1643

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

```
Met Glu Val Thr His Val Ser Gln Leu Thr Arg Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Asp Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Gly Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1644
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v165 IgV

<400>  1644

Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln Val Phe Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg His Gly Glu
        35                  40                  45
```

```
Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ala Tyr Val
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Lys Val Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Thr Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1645
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v166 IgV

<400> 1645

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Leu Ala Val Phe His Gln Arg Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Ile Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1646
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v167 IgV

<400>  1646

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ile Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Met Pro Phe
            20                  25                  30


Met Glu Val Ser His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Leu Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Ser Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95
```

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1647
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v168 IgV

<400> 1647

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Glu Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Trp Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1648
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v169 IgV

<400> 1648

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Phe Gly
1   5   10   15

Ile Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Val Arg His Gly Lys
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1649
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v170 IgV

<400> 1649

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Leu Gly Ala Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His His Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Val Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115
```

<210> 1650
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v171 IgV

<400> 1650

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Gly Ser Val Thr Leu Pro Arg Tyr Leu Gln Val Pro Asp
            20                  25                  30


Met Gly Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro Ala Tyr Gly
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Gly Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Met Phe Val Met Phe Pro Arg Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1651
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v172 IgV

<400>  1651

Pro Gly Thr Gly Asp Val Val Val Gln Glu Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

```
Arg Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Thr
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1652
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v173 IgV

<400> 1652

```
Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg Arg Gly Glu
        35                  40                  45
```

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Thr Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1653
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v174 IgV

<400> 1653

Pro Gly Thr Gly Asp Ala Val Val Gln Ala Pro Thr Gln Val Phe Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Ser Leu Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

```
Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1654
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v175 IgV

<400>  1654

Pro Gly Thr Gly Glu Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Ala Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95
```

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1655
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v176 IgV

<400> 1655

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Met Glu Val Thr His Ala Ser Gln Leu Thr Trp Ala Arg Arg Gly Glu
35 40 45

Ser Gly Cys Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Ser Gly Ala Glu Leu
65 70 75 80

Arg Tyr Ala Ser Pro Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1656
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v177 IgV

<400> 1656

Pro Gly Thr Gly Asp Val Val Glu Gln Ala Pro Thr Gln Val His Gly
1   5   10   15

Tyr Leu Gly Asp Ser Glu Thr Leu Pro Cys Tyr Leu Gln Val Pro Ser
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg Arg Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Arg Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1657
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v178 IgV

<400> 1657

Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln Val Phe Gly
1   5   10   15

Phe Leu Gly Ala Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Asp Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Ala Glu Asp Glu Gly
                85   90   95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1658
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v179 IgV

<400> 1658

```
Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Arg Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1659
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v180 IgV

<400>  1659

Pro Gly Thr Gly Asp Leu Val Met Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Ser
            20                  25                  30
```

```
Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Gly Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser Arg Ser Met
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1660
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v181 IgV

<400>  1660

Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln Val Tyr Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Ala Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Gly Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45
```

```
Ser Gly Ser Val Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Thr Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Ile Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1661
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v182 IgV

<400> 1661

```
Pro Gly Thr Gly Asp Val Gly Val Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Gln Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80
```

```
Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1662
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v183 IgV

<400>  1662

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe Arg Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Gly Ala Ser Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95
```

Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1663
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v184 IgV

<400> 1663

Pro Gly Thr Gly Asp Ala Val Val Gln Ala Pro Thr Gln Val Ser Gly
1 5 10 15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
20 25 30

Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
35 40 45

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Gly Tyr Ser
50 55 60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65 70 75 80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
85 90 95

Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Arg Ile Arg Ser Val
100 105 110

Asp Ile Trp Leu
115

<210> 1664
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v185 IgV

<400> 1664

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Thr Gly
1   5   10   15

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20   25   30

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35   40   45

Ala Gly Ser Met Ala Ala Phe His Arg Thr Lys Gly Pro Cys Tyr Ser
    50   55   60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65   70   75   80

Arg Asn Ala Ser Leu Arg Met Thr Gly Leu Arg Val Glu Asp Glu Gly
                85   90   95

Tyr Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100   105   110

Asp Ile Trp Leu
        115

<210> 1665
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v186 IgV

<400> 1665

```
Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln Val Phe Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asp
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Glu Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Asp
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Asn Val
            100                 105                 110


Asp Ile Trp Leu
        115
```

<210> 1666
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v187 IgV

<400> 1666

```
Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln Val Thr Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Ser
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Thr Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1667
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v188 IgV

<400>  1667

Pro Gly Thr Gly Asp Asp Val Met Leu Ala Pro Thr Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
            20                  25                  30
```

```
Met Val Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45


Ser Gly Ser Ile Ala Val Phe His Arg Thr Gln Gly Pro Ser Tyr Ser
    50                  55                  60


Glu Ser Gln Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80


Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95


Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110


Asp Ile Trp Leu
        115


<210>  1668
<211>  116
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v189 IgV

<400>  1668

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ser Gln Val Ser Gly
1               5                   10                  15


Phe Leu Gly Asp Ser Val Thr Leu Pro Cys His Leu Leu Val Pro Asn
            20                  25                  30


Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
        35                  40                  45
```

```
Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro Ser Tyr Ser
    50                  55                  60

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly Ala Glu Leu
65                  70                  75                  80

Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu Asp Glu Gly
                85                  90                  95

Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser Arg Ser Val
            100                 105                 110

Asp Ile Trp Leu
        115
```

<210> 1669
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v144 IgV

<400> 1669

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Asp Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Asn Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Gln Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Tyr Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1670
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v145 IgV

<400>  1670

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Val Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Leu Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Glu Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1671
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v146 IgV

<400>  1671

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr Gln Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Lys Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Val Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1672
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v147 IgV

<400> 1672

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Arg
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Gly Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Ala Phe Pro Gln Gly Ser
            100   105   110

Trp Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1673
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v148 IgV

<400> 1673

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val His Ala Pro Thr Gln
1   5   10   15

Val Thr Gly Phe Ser Ser Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Ala Phe His Gln Thr Arg Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1674
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v149 IgV

<400> 1674

```
Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Pro Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


Gln Gly Glu Ser Gly Ser Met Ala Val Tyr His Arg Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1675
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v150 IgV

<400>  1675

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Cys Ala Arg
        35                  40                  45


Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Thr Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Thr Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1676
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v151 IgV

<400>  1676

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Thr Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

His Gly Gly Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Trp Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1677
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v152 IgV

<400> 1677

Trp Pro Pro Pro Gly Thr Gly Asp Val Phe Val Gln Ala Pro Ser Gln
1   5   10   15

Val Leu Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Gln
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Met Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1678
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v153 IgV

<400>  1678

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Met Gly Asp Ser Val Thr Leu Pro Cys Phe Leu Gln
            20                  25                  30


Val Pro Asp Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Trp Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Gly Ile Trp Leu Arg Val Leu
115 120

<210> 1679
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v154 IgV

<400> 1679

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Val Ser Gly Gly Met Ala Val Phe His Arg Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Gln Gly
65 70 75 80

Ala Gly Leu Arg Asn Ala Thr Leu Arg Ile Ser Arg Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1680
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v155 IgV

<400> 1680

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr His
1   5   10   15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1681
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v156 IgV

<400> 1681

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Gly Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Arg Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Leu Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Ala Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1682
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v157 IgV

<400> 1682

```
Trp Pro Pro Pro Gly Thr Gly Gly Ile Val Ala Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Pro Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Ala Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Leu Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Ala Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1683
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v158 IgV

<400>  1683

Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Glu Arg
        35                  40                  45


His Ser Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Gly Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1684
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v159 IgV

<400>  1684

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Pro Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1685
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v160 IgV

<400> 1685

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Ser His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Pro Gly Arg Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1686
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v161 IgV

<400>  1686

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asn Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

```
Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Asn Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1687
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v162 IgV

<400>  1687

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Ser Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Val Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1688
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v163 IgV

<400> 1688

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe Asn Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Ala Ala Ala Arg Pro Gly
65   70   75   80

Thr Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1689
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v164 IgV

<400> 1689

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Arg Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Asp Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Gly Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1690
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v165 IgV

<400> 1690

```
Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Ala Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ala Tyr Val Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Lys Val Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Thr Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1691
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v166 IgV

<400>  1691

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Leu Ala Val Phe His Gln Arg Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Ile Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1692
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v167 IgV

<400>  1692

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ile Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Met Pro Phe Met Glu Val Ser His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Leu Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Ser Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1693
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v168 IgV

<400> 1693

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Glu Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Glu Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Trp Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1694
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v169 IgV

<400>  1694

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Ile Leu Gly Asp Ser Val Met Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Val Arg
        35                  40                  45


His Gly Lys Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1695
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v170 IgV

<400> 1695

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Thr Gly Phe Leu Gly Ala Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His His Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1696
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v171 IgV

<400> 1696

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Gly Ser Val Thr Leu Pro Arg Tyr Leu Gln
            20   25   30

Val Pro Asp Met Gly Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Ile Ala Val Phe His Gln Thr Lys Gly Pro
    50   55   60

Ala Tyr Gly Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Gly Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Arg Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1697
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v172 IgV

<400> 1697

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Glu Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Arg Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
    50                  55                  60


Ser Tyr Thr Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1698
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v173 IgV

<400> 1698

```
Trp Pro Pro Pro Gly Thr Gly Asp Ile Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asp Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1699
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v174 IgV

<400>  1699

Trp Pro Pro Pro Gly Thr Gly Asp Ala Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Ser Leu Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1700
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v175 IgV

<400>  1700

Trp Pro Pro Pro Gly Thr Gly Glu Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Ala Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120
```

<210> 1701
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v176 IgV

<400> 1701

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Ala Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

Arg Gly Glu Ser Gly Cys Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Ser Gly
65                  70                  75                  80
```

```
Ala Glu Leu Arg Tyr Ala Ser Pro Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1702
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v177 IgV

<400>  1702

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Glu Gln Ala Pro Thr Gln
1               5                   10                  15


Val His Gly Tyr Leu Gly Asp Ser Glu Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Ser Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


Arg Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95
```

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1703
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v178 IgV

<400> 1703

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Ala Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Asp
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Ala Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1704
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v179 IgV

<400> 1704

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Arg Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Arg Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1705
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v180 IgV

<400> 1705

Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Met Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Ser Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Gly Met Ala Val Phe His Gln Thr Lys Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Met Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1706
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v181 IgV

<400> 1706

```
Trp Pro Pro Pro Gly Thr Gly Asp Leu Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Tyr Gly Phe Leu Gly Asp Ser Ala Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Gly Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Val Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Thr Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Ile Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Thr Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1707
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v182 IgV

<400>  1707

Trp Pro Pro Pro Gly Thr Gly Asp Val Gly Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30
```

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Gln Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1708
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v183 IgV

<400>  1708

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45
```

His Gly Glu Ser Gly Ser Met Ala Val Phe Arg Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Gly Ala Ser Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1709
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v184 IgV

<400> 1709

Trp Pro Pro Pro Gly Thr Gly Asp Ala Val Val Gln Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Thr Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Gly Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

```
Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Thr Phe Val Thr Phe Pro Gln Arg Ile
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1710
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD155 v185 IgV

<400>  1710

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ala Gly Ser Met Ala Ala Phe His Arg Thr Lys Gly Pro
    50                  55                  60


Cys Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Thr Gly Leu Arg Val Glu
                85                  90                  95
```

Asp Glu Gly Tyr Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1711
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v186 IgV

<400> 1711

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1 5 10 15

Val Phe Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asp Met Glu Val Thr His Val Ser Gln Leu Thr Trp Glu Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Lys Gly Pro
50 55 60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
85 90 95

Asp Glu Asp Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
100 105 110

Arg Asn Val Asp Ile Trp Leu Arg Val Leu
115 120

<210> 1712
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v187 IgV

<400> 1712

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Ala Gln Ala Pro Thr Gln
1   5   10   15

Val Thr Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Ser Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Thr Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Thr Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1713
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v188 IgV

<400> 1713

Trp Pro Pro Pro Gly Thr Gly Asp Asp Val Met Leu Ala Pro Thr Gln
1   5   10   15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20   25   30

Val Pro Asn Met Val Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35   40   45

His Gly Glu Ser Gly Ser Ile Ala Val Phe His Arg Thr Gln Gly Pro
    50   55   60

Ser Tyr Ser Glu Ser Gln Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65   70   75   80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85   90   95

Asp Glu Gly Asn Tyr Thr Cys Met Phe Val Met Phe Pro Gln Gly Ser
            100   105   110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115   120

<210> 1714
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> CD155 v189 IgV

<400> 1714

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Ser Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys His Leu Leu
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Arg Gly Pro
    50                  55                  60


Ser Tyr Ser Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Pro Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Ser Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Leu Phe Val Met Phe Pro Gln Gly Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu
        115                 120


<210>  1715
<211>  231
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Stack Fc Lysine removed (homodimeric)

<400>  1715

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15


Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30
```

```
Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220
```

```
Ser Leu Ser Leu Ser Pro Gly
225                 230


<210>  1716
<211>  494
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1/CD155 Stack 1 Fc fusion

<400>  1716

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15


Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30


Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45


His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60


Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80


Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95


Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110


Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly
        115                 120                 125
```

```
Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro
    130                 135                 140

Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe
145                 150                 155                 160

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
                165                 170                 175

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
            180                 185                 190

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
        195                 200                 205

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
    210                 215                 220

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
225                 230                 235                 240

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
                245                 250                 255

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
            260                 265                 270

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
        275                 280                 285

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
    290                 295                 300

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
305                 310                 315                 320
```

```
Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
                325                 330                 335

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
            340                 345                 350

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys Gly Gly Gly Gly
        355                 360                 365

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val
    370                 375                 380

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
385                 390                 395                 400

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
                405                 410                 415

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
            420                 425                 430

Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
        435                 440                 445

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
    450                 455                 460

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
465                 470                 475                 480

Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
                485                 490
```

<210> 1717
<211> 494
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1/CD155 Stack 2 Fc fusion

<400> 1717

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
        115                 120                 125


Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
    130                 135                 140


Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
145                 150                 155                 160


Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
                165                 170                 175
```

```
Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
            180                 185                 190

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
        195                 200                 205

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
    210                 215                 220

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
225                 230                 235                 240

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
                245                 250                 255

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
            260                 265                 270

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
        275                 280                 285

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
    290                 295                 300

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
305                 310                 315                 320

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
                325                 330                 335

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
            340                 345                 350

Leu Ser Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
        355                 360                 365
```

```
Gly Gly Gly Ser Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln
    370                 375                 380

Ala Pro Thr Gln Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro
385                 390                 395                 400

Cys Tyr Leu Gln Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu
                405                 410                 415

Thr Trp Ala Arg His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln
            420                 425                 430

Thr Gln Gly Pro Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala
        435                 440                 445

Ala Arg Leu Gly Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly
    450                 455                 460

Leu Arg Val Glu Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe
465                 470                 475                 480

Pro Gln Arg Ser Arg Ser Val Asp Ile Trp Leu Arg Val Leu
                485                 490
```

<210> 1718
<211> 494
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1/CD155 Stack 3 Fc fusion

<400> 1718

```
Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1               5                   10                  15
```

```
Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
            20                  25                  30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly
        115                 120                 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys
    130                 135                 140

Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys
145                 150                 155                 160

Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp
                165                 170                 175

Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp
            180                 185                 190

Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys
        195                 200                 205
```

```
Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys
    210                 215                 220

Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly
225                 230                 235                 240

Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr
            260                 265                 270

Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe
        275                 280                 285

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
    290                 295                 300

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
305                 310                 315                 320

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
                325                 330                 335

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
            340                 345                 350

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
        355                 360                 365

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
    370                 375                 380

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
385                 390                 395                 400
```

```
Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
                405                 410                 415


Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
            420                 425                 430


Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
        435                 440                 445


Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
    450                 455                 460


Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
465                 470                 475                 480


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                485                 490


<210>  1719
<211>  494
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1/CD155 Stack 4 Fc fusion

<400>  1719

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro
    130                 135                 140

Thr Gln Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr
145                 150                 155                 160

Leu Gln Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp
                165                 170                 175

Ala Arg His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln
            180                 185                 190

Gly Pro Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg
        195                 200                 205

Leu Gly Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg
    210                 215                 220

Val Glu Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln
225                 230                 235                 240

Arg Ser Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly
                245                 250                 255
```

```
Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr
            260                 265                 270

Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe
        275                 280                 285

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
    290                 295                 300

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
305                 310                 315                 320

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
                325                 330                 335

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
            340                 345                 350

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
        355                 360                 365

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
    370                 375                 380

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
385                 390                 395                 400

Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
                405                 410                 415

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
            420                 425                 430

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
        435                 440                 445
```

```
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
    450                 455                 460


Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
465                 470                 475                 480


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                485                 490


<210>  1720
<211>  507
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1/CD155 Stack 5 Fc fusion

<400>  1720

His Met Ser Ser Val Ser Ala Gln Glu Pro Lys Ser Ser Asp Lys Thr
1               5                   10                  15


His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser
            20                  25                  30


Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
        35                  40                  45


Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
    50                  55                  60


Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
65                  70                  75                  80


Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
                85                  90                  95
```

```
Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
            100                 105                 110

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
        115                 120                 125

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
    130                 135                 140

Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
145                 150                 155                 160

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
                165                 170                 175

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
            180                 185                 190

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
        195                 200                 205

Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
    210                 215                 220

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
225                 230                 235                 240

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Trp
                245                 250                 255

Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val
            260                 265                 270

Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val
        275                 280                 285
```

```
Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His
    290                 295                 300

Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Trp
305                 310                 315                 320

Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala
                325                 330                 335

Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu Asp
            340                 345                 350

Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg
        355                 360                 365

Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly Gly
    370                 375                 380

Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp
385                 390                 395                 400

Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe
                405                 410                 415

Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu
            420                 425                 430

Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln
        435                 440                 445

Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp
    450                 455                 460

Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu
465                 470                 475                 480
```

Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala
485 490 495

Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
500 505

<210> 1721
<211> 507
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1/CD155 Stack 6 Fc fusion

<400> 1721

His Met Ser Ser Val Ser Ala Gln Glu Pro Lys Ser Ser Asp Lys Thr
1 5 10 15

His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser
20 25 30

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
35 40 45

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
50 55 60

Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
65 70 75 80

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
85 90 95

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
100 105 110

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
115 120 125

```
Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
    130                 135                 140

Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
145                 150                 155                 160

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
                165                 170                 175

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
            180                 185                 190

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
        195                 200                 205

Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
    210                 215                 220

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
225                 230                 235                 240

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe
                245                 250                 255

Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn
            260                 265                 270

Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala
        275                 280                 285

Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe
    290                 295                 300

Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln
305                 310                 315                 320
```

```
Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu
                325                 330                 335

Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met
            340                 345                 350

Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
        355                 360                 365

Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
    370                 375                 380

Ser Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr
385                 390                 395                 400

Gln Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu
                405                 410                 415

Gln Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala
            420                 425                 430

Arg His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly
        435                 440                 445

Pro Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu
    450                 455                 460

Gly Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val
465                 470                 475                 480

Glu Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg
                485                 490                 495

Ser Arg Ser Val Asp Ile Trp Leu Arg Val Leu
            500                 505
```

<210> 1722
<211> 635
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1/CD112/CD155 Stack 1 Fc fusion

<400> 1722

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro
    130                 135                 140
```

```
Thr Gln Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr
145                 150                 155                 160


Leu Gln Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp
                165                 170                 175


Ala Arg His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln
            180                 185                 190


Gly Pro Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg
        195                 200                 205


Leu Gly Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg
    210                 215                 220


Val Glu Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln
225                 230                 235                 240


Arg Ser Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly
                245                 250                 255


Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr
            260                 265                 270


Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe
        275                 280                 285


Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
    290                 295                 300


Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
305                 310                 315                 320


Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
                325                 330                 335
```

```
Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
            340                 345                 350

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
        355                 360                 365

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
    370                 375                 380

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
385                 390                 395                 400

Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
                405                 410                 415

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
            420                 425                 430

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
        435                 440                 445

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
    450                 455                 460

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
465                 470                 475                 480

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Gly Gly Gly
                485                 490                 495

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Asp Val Arg
            500                 505                 510

Val Gln Val Leu Pro Glu Val Arg Gly Gln Leu Gly Gly Thr Val Glu
        515                 520                 525
```

```
Leu Pro Cys His Leu Leu Pro Pro Val Pro Gly Leu Tyr Ile Ser Leu
    530                 535                 540


Val Thr Trp Gln Arg Pro Asp Ala Pro Ala Asn His Gln Asn Val Ala
545                 550                 555                 560


Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser Pro Lys Pro Gly
                565                 570                 575


Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser Thr Gly Gln Asp
            580                 585                 590


Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu His Gly Leu Thr
        595                 600                 605


Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala Thr Phe Pro Lys
    610                 615                 620


Gly Phe Val Arg Gly Met Thr Trp Leu Arg Val
625                 630                 635


<210>  1723
<211>  635
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1/CD112/CD155 Stack 2 Fc fusion

<400>  1723

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro
    130                 135                 140

Thr Gln Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr
145                 150                 155                 160

Leu Gln Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp
                165                 170                 175

Ala Arg His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln
            180                 185                 190

Gly Pro Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg
        195                 200                 205

Leu Gly Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg
    210                 215                 220

Val Glu Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln
225                 230                 235                 240
```

```
Arg Ser Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Asp Val Arg Val Gln
            260                 265                 270

Val Leu Pro Glu Val Arg Gly Gln Leu Gly Gly Thr Val Glu Leu Pro
        275                 280                 285

Cys His Leu Leu Pro Pro Val Pro Gly Leu Tyr Ile Ser Leu Val Thr
    290                 295                 300

Trp Gln Arg Pro Asp Ala Pro Ala Asn His Gln Asn Val Ala Ala Phe
305                 310                 315                 320

His Pro Lys Met Gly Pro Ser Phe Pro Ser Pro Lys Pro Gly Ser Glu
                325                 330                 335

Arg Leu Ser Phe Val Ser Ala Lys Gln Ser Thr Gly Gln Asp Thr Glu
            340                 345                 350

Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu His Gly Leu Thr Val Glu
        355                 360                 365

Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala Thr Phe Pro Lys Gly Phe
    370                 375                 380

Val Arg Gly Met Thr Trp Leu Arg Val Gly Gly Gly Gly Ser Gly Gly
385                 390                 395                 400

Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro
                405                 410                 415

Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro
            420                 425                 430
```

```
Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
        435                 440                 445

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
    450                 455                 460

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
465                 470                 475                 480

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
                485                 490                 495

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
            500                 505                 510

Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
        515                 520                 525

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
    530                 535                 540

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
545                 550                 555                 560

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
                565                 570                 575

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
            580                 585                 590

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
        595                 600                 605

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
    610                 615                 620
```

```
Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
625                 630                 635


<210>  1724
<211>  636
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1/CD112/CD155 Stack 3 Fc fusion

<400>  1724

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125
```

```
Gly Ser Gln Asp Val Arg Val Gln Val Leu Pro Glu Val Arg Gly Gln
    130                 135                 140

Leu Gly Gly Thr Val Glu Leu Pro Cys His Leu Leu Pro Pro Val Pro
145                 150                 155                 160

Gly Leu Tyr Ile Ser Leu Val Thr Trp Gln Arg Pro Asp Ala Pro Ala
                165                 170                 175

Asn His Gln Asn Val Ala Ala Phe His Pro Lys Met Gly Pro Ser Phe
            180                 185                 190

Pro Ser Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys
        195                 200                 205

Gln Ser Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu
    210                 215                 220

Ala Leu His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu
225                 230                 235                 240

Phe Ala Thr Phe Pro Lys Gly Phe Val Arg Gly Met Thr Trp Leu Arg
                245                 250                 255

Val Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
            260                 265                 270

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
        275                 280                 285

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
    290                 295                 300

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
305                 310                 315                 320
```

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
                325                 330                 335

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
            340                 345                 350

Ala Glu Leu Arg Asn Ala Ser Leu Arg Met Phe Gly Leu Arg Val Glu
        355                 360                 365

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
    370                 375                 380

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly
385                 390                 395                 400

Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro
                405                 410                 415

Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe
            420                 425                 430

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
        435                 440                 445

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
    450                 455                 460

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
465                 470                 475                 480

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
                485                 490                 495

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
            500                 505                 510
```

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
515 520 525

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
530 535 540

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
545 550 555 560

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
565 570 575

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
580 585 590

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
595 600 605

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
610 615 620

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
625 630 635

<210> 1725
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v66

<400> 1725

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
20 25 30

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp
        115                 120                 125

Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro
    130                 135                 140

Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly
145                 150                 155                 160

Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val
                165                 170                 175

Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys
            180                 185                 190

Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val
        195                 200                 205

Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1726
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV 66

<400> 1726

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Leu Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 1727
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v66

<400> 1727

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala
        115
```

<210> 1728
<211> 221
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Wildtype PD-L1 ECD

<400> 1728

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1729
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v67

<400>  1729

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1730
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v68

<400> 1730

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Leu Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1731
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v69

<400> 1731

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Ser Arg Gly Leu Asp Pro Glu Lys Asn Gln Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1732
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v70

<400>  1732

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ser Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Gln
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Lys Asn Gln Thr Ala Glu Phe Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1733
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v71

<400>  1733

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Arg Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Leu Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Gln
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Asn Asn Gln Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Leu
    210                 215                 220
```

<210> 1734
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v72

<400> 1734

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Leu Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Phe Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1735
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v73

<400>  1735

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Ser Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Arg Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Ser Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1736
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v74

<400> 1736

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Val Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His His Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1737
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v75

<400>  1737

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Ile Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1738
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v76

<400> 1738

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1739
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v77

<400> 1739

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Thr Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Lys Asn Gln Thr Ala Glu Phe Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1740
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v78

<400>  1740

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Gln
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1741
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v79

<400>  1741

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1742
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v80

<400> 1742

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Val Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1743
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v81

<400>  1743

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1744
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v82

<400>  1744

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Gly Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1745
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v83

<400>  1745

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn Gln Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1746
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v84

<400> 1746

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1747
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v85

<400> 1747

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1748
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v86

<400>  1748

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1749
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v87

<400> 1749

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ser Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1750
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v88

<400> 1750

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Thr Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1751
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v89

<400>  1751

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Ala Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Leu Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1752
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v90

<400>  1752

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Ser Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Ser Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1753
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v91

<400>  1753

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Arg Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Ala
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Ala Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1754
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v92

<400> 1754

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Val Ile Gln
35 40 45

Phe Val His Gly Glu Glu Gly Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Glu Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1755
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v93

<400> 1755

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Thr Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1756
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v94

<400>  1756

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1757
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v95

<400>  1757

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1758
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v96

<400> 1758

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His His Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Ser Arg Arg Leu Asp Pro Glu Glu Tyr His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1759
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v97

<400>  1759

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1760
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v98

<400>  1760

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Pro Ser Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1761
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v99

<400>  1761

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Ile Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Gly Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Gly Glu Asn His Thr Ala Glu Leu Ala Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1762
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v100

<400> 1762

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Thr Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1763
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v101

<400> 1763

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Asn
                165                 170                 175
```

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1764
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v102

<400> 1764

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1765
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v103

<400>  1765

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asp Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1766
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v104

<400> 1766

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1767
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v105

<400>  1767

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn Gln Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1768
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v106

<400>  1768

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1769
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v107

<400>  1769

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Ala Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1770
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v108

<400> 1770

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Glu Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1771
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v109

<400> 1771

```
Phe Thr Val Thr Val Pro Lys Asp Leu Phe Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Arg Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Ala Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1772
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v110

<400>  1772

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1773
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v111

<400>  1773

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Met
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1774
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v112

<400> 1774

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1775
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v113

<400>  1775

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1776
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v114

<400>  1776

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1777
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v115

<400>  1777

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1778
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v116

<400>  1778

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1779
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v117

<400> 1779

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Phe Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1780
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v118

<400> 1780

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Asp Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1781
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v119

<400>  1781

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1782
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v120

<400> 1782

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Thr Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Tyr Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Ser Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1783
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v121

<400>  1783

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Gly Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Pro Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1784
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v122

<400>  1784

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Ile Asn Val Thr
                165                 170                 175

Cys Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1785
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v123

<400>  1785

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1786
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v124

<400>  1786

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Thr Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1787
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v125

<400> 1787

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Tyr Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1788
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v126

<400> 1788

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Tyr Ser Lys Arg Glu Gly Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1789
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v127

<400>  1789

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Val Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1790
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v128

<400> 1790

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Phe Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1791
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v129

<400>  1791

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1792
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v131

<400>  1792

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Thr Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1793
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v131

<400>  1793

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Asp Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Ala Thr Thr Asn Glu Val Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1794
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v132

<400> 1794

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Tyr Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Ile Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Ser Asp Pro Glu Glu Asn His Ala Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1795
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v133

<400> 1795

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Asn Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Ser Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1796
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v134

<400> 1796

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Asp Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Trp Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1797
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v135

<400>  1797

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Val Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Leu Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1798
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v136

<400> 1798

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asp His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1799
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v137

<400>  1799

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Thr Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Ala Thr Thr Asn Glu Val Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1800
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v138

<400>  1800

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Ser Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1801
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v139

<400>  1801

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Arg Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Ala Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1802
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v140

<400> 1802

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Ile Thr Asn Ser Arg Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1803
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v141

<400> 1803

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

Ser Thr Leu Arg Ile Asn Ala Thr Thr Asn Glu Ile Phe Tyr Cys Ser
180 185 190

Phe Gly Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1804
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v142

<400> 1804

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Thr Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1805
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v143

<400>  1805

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Ala Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1806
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v144

<400> 1806

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Glu Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Ala Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1807
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v145

<400>  1807

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Ala Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Ile Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1808
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v146

<400>  1808

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Asn Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Thr Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1809
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v147

<400>  1809

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Asn Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Arg Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Ile Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1810
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v148

<400> 1810

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Arg Thr Ser Ser Asp His Gln Val Leu Gly Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1811
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v149

<400> 1811

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Arg Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Glu Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Val Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1812
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v150

<400>  1812

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Arg Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Asn Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Thr Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1813
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v151

<400>  1813

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Ser
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220
```

<210> 1814
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v152

<400> 1814

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Ser
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1815
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v153

<400>  1815

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Leu Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Leu Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Gly Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1816
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v154

<400>  1816

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asp His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1817
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v155

<400>  1817

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Glu Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Gly Leu Asp Pro Glu Glu Asp His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1818
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v156

<400> 1818

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Pro Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1819
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v67

<400> 1819

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1820
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v68

<400>  1820

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Leu Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1821
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v69

<400>  1821

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Ser Arg Gly Leu Asp Pro Glu Lys Asn Gln Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1822
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v70

<400> 1822

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ser Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Gln
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Lys Asn Gln Thr Ala Glu Phe Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1823
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v72

<400>  1823

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Leu Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Phe Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1824
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v73

<400>  1824

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Ser Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Arg Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Ser Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1825
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v74

<400>  1825

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Val Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His His Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 1826
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v75

<400> 1826

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Ile Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1827
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v76

<400> 1827

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1828
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v77

<400>  1828

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Thr Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Lys Asn Gln Thr Ala Glu Phe Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1829
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v78

<400>  1829

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Gln
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1830
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v79

<400> 1830

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1831
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v80

<400>  1831

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Val Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1832
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v81

<400>  1832

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1833
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v82

<400>  1833

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Gly Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1834
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v83

<400>  1834

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn Gln Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1835
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v84

<400> 1835

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1836
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v85

<400>  1836

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1837
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v86

<400>  1837

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Ala Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1838
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v87

<400> 1838

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ser Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1839
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v88

<400>  1839

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Thr Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 1840
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v89

<400> 1840

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Ala Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Leu Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1841
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v90

<400>  1841

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Ser Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Ser Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1842
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v91

<400>  1842

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Arg Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Ala
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Ala Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1843
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v92

<400> 1843

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Val Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Gly Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Glu Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1844
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v93

<400>  1844

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Thr Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1845
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v94

<400>  1845

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1846
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v95

<400> 1846

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1847
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v96

<400>  1847

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His His Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Ser Arg Arg Leu Asp Pro Glu Glu Tyr His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1848
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v97

<400>  1848

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1849
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v98

<400>  1849

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Pro Ser Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 1850
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v99

<400> 1850

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Ile Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Gly Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Gly Glu Asn His Thr Ala Glu Leu Ala Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1851
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v100

<400> 1851

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Thr Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1852
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v101

<400>  1852

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Asn
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1853
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v102

<400>  1853

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1854
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v103

<400> 1854

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asp Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1855
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v104

<400>  1855

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1856
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v105

<400>  1856

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn Gln Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1857
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v106

<400>  1857

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1858
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v107

<400> 1858

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Ala Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1859
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v108

<400> 1859

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Glu Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1860
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v109

<400>  1860

Phe Thr Val Thr Val Pro Lys Asp Leu Phe Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Val Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Arg Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Ala Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1861
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v110

<400>  1861

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1862
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v111

<400> 1862

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Met
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1863
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v112

<400>  1863

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1864
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v113

<400>  1864

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1865
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v114

<400>  1865

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1866
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v115

<400>  1866

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1867
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v116

<400> 1867

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1868
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v117

<400>  1868

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Phe Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1869
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v118

<400>  1869

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Asp Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1870
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v119

<400> 1870

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1871
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v120

<400>  1871

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Thr Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Tyr Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Ser Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1872
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v121

<400>  1872

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Gly Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Pro Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1873
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v122

<400>  1873

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Ile Asn Val Thr
165 170 175

Cys Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 1874
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v123

<400> 1874

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1875
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v124

<400> 1875

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Thr Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1876
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v125

<400>  1876

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Tyr Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1877
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v126

<400>  1877

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Tyr Ser Lys Arg Glu Gly Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1878
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v127

<400> 1878

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Val Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1879
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v128

<400>  1879

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Phe Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1880
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v129

<400>  1880

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1881
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v131

<400>  1881

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Thr Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1882
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v131

<400>  1882

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Asp Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Ala Thr Thr Asn Glu Val Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1883
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v132

<400> 1883

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Tyr Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Ile Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Ser Asp Pro Glu Glu Asn His Ala Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1884
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v133

<400>  1884

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Asn Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Ser Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1885
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v134

<400>  1885

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Asp Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Trp Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1886
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v135

<400> 1886

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Val Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Leu Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1887
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v136

<400>  1887

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asp His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1888
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v137

<400>  1888

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Thr Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Ala Thr Thr Asn Glu Val Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1889
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v138

<400>  1889

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Ser Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
210 215 220

<210> 1890
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v139

<400> 1890

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Arg Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Ala Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1891
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v140

<400> 1891

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Ile Thr Asn Ser Arg Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1892
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v141

<400>  1892

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Ala Thr Thr Asn Glu Ile Phe Tyr Cys Ser
            180                 185                 190


Phe Gly Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1893
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v142

<400>  1893

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Thr Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1894
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v143

<400> 1894

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Ala Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1895
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v144

<400>  1895

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Glu Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Ala Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1896
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v145

<400>  1896

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Ala Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Ile Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Ala Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1897
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v146

<400>  1897

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Asn Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Thr Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1898
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v147

<400> 1898

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Asn Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Arg Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Ile Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1899
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
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<223> PD-L1 ECD v148

<400> 1899

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Arg Thr Ser Ser Asp His Gln Val Leu Gly Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Thr Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1900
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v149

<400>  1900

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Arg Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Glu Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Val Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110
```

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Ser Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1901
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v150

<400>  1901

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Arg Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Asp Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Asn Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Thr Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1902
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v151

<400> 1902

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Ser
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1903
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v152

<400>  1903

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Ser
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1904
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v153

<400>  1904

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Leu Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Leu Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Gly Ser Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

```
Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1905
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v154

<400>  1905

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125
```

```
Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Val Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Gly Leu Asp Pro Glu Glu Asp His Thr Ala Glu Leu Val Ile
        195                 200                 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220
```

<210> 1906
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v155

<400> 1906

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Glu Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60
```

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asp His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1907
<211>  220
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> PD-L1 ECD v156

<400> 1907

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Ser Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Glu
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175
```

```
Ser Thr Pro Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Gly Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg
    210                 215                 220


<210>  1908
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v67

<400>  1908

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Gly Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 1909
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v75

<400> 1909

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Ile Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Gly Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 1910
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v80

<400> 1910

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Val Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Gly Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 1911
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v81

<400> 1911

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
100 105

<210> 1912
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v82

<400> 1912

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Gly Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

```
Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Gly Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  1913
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v87

<400>  1913

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ser Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 1914
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v94

<400> 1914

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
100 105

<210> 1915
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v98

<400> 1915

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Pro Ser Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
100 105

<210> 1916
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v100

<400> 1916

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Thr Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Thr Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

```
Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105


<210>  1917
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v102

<400>  1917

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80
```

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Gly Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 1918
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v103

<400> 1918

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asp Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Leu Ile Gly Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 1919
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v110

<400> 1919

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
20 25 30

Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln Phe Val His Gly Glu
35 40 45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
50 55 60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65 70 75 80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
85 90 95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 1920
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v118

<400> 1920

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1 5 10 15

```
Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45


Glu Asp Leu Lys Asp Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
                85                  90                  95


Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105


<210>  1921
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v127

<400>  1921

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30


Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45
```

```
Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys Met Val Ser Tyr Gly
                85                  90                  95

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105
```

<210> 1922
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v152

<400> 1922

```
Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
1               5                   10                  15

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
            20                  25                  30

Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
        35                  40                  45

Glu Asp Leu Lys Val Gln His Ser Ser Tyr Ser Gln Arg Ala Arg Leu
    50                  55                  60

Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
65                  70                  75                  80

Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Gly Tyr Gly
                85                  90                  95
```

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105

<210> 1923
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v67

<400> 1923

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 1924
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v75

<400> 1924

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Ile Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 1925
<211> 114
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L1 IgV v80

<400> 1925

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Val Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 1926
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v81

<400> 1926

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110


Asn Ala



<210>  1927
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v82

<400>  1927

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Gly Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 1928
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v87

<400> 1928

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ser Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  1929
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v94

<400>  1929

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
100 105 110

Asn Ala

<210> 1930
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v98

<400> 1930

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Pro Ser Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
100 105 110

Asn Ala

<210> 1931
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v100

<400> 1931

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Thr Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asn Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Leu Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Glu Val
            100                 105                 110
```

Asn Ala

<210> 1932
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v102

<400> 1932

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 1933
<211> 114
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L1 IgV v103

<400> 1933

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asp Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Leu Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100   105   110

Asn Ala

<210> 1934
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v110

<400> 1934

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala
```

<210> 1935
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v118

<400> 1935

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Asp Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 1936
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 IgV v127

<400> 1936

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Val Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala



<210>  1937
<211>  114
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 IgV v152

<400>  1937

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Ser
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala

<210> 1938
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> Fc (C5S (C220S), R77C, (R292C), N82G (N297G), V87C (V302C), L232del (K447del))

<400> 1938

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1 5 10 15

Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
20 25 30

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
35 40 45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
50 55 60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln
65 70 75 80

Tyr Gly Ser Thr Tyr Arg Cys Val Ser Val Leu Thr Val Leu His Gln
85 90 95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala

100 105 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
115 120 125

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
130 135 140

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145 150 155 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
165 170 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
180 185 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
195 200 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
210 215 220

Ser Leu Ser Leu Ser Pro Gly
225 230

<210> 1939
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> Fc with C220S/L234A/L235E/G237A/K447del

<400> 1939

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1 5 10 15

```
Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205
```

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
210 215 220

Ser Leu Ser Leu Ser Pro Gly
225 230

<210> 1940
<211> 230
<212> PRT
<213> Artificial Sequence

<220>
<223> Fc with C220S/E233P/L234V/L235A/G236del/S267K/K447del

<400> 1940

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1 5 10 15

Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
20 25 30

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
35 40 45

Asp Val Lys His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
50 55 60

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
65 70 75 80

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
85 90 95

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
100 105 110

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg

115 120 125

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
130 135 140

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
145 150 155 160

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
165 170 175

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
180 185 190

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
195 200 205

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
210 215 220

Leu Ser Leu Ser Pro Gly
225 230

<210> 1941
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Linker

<400> 1941

Gly Ser Gly Gly Gly Gly Ser
1 5

<210> 1942
<211> 5
<212> PRT

<213> Artificial Sequence

<220>
<223> 4GS Linker

<400> 1942

Gly Gly Gly Gly Ser
1 5

<210> 1943
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v1

<400> 1943

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Asn Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val Asn Gly Glu Glu Asp Leu Glu Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115   120   125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130   135   140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145   150   155   160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165   170   175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180   185   190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195   200   205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210   215   220

<210> 1944
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v2

<400> 1944

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Thr Gln

35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1945

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v3

<400> 1945

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Glu Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1946
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v4

<400> 1946

Phe Thr Val Thr Val Ser Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Thr Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys

85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1947
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v5

<400> 1947

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1948
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v6

<400> 1948

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1949
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v7

<400> 1949

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1950
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v8
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<400> 1950

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
```

180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1951
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v9

<400> 1951

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

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Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1952
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v10

<400>  1952

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Asn Ile Ile Gln
```

35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1953

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v11

<400> 1953

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1954
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v12

<400> 1954

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asp Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Gly Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys

85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1955
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v13

<400> 1955

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Ser Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
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Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1956
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v14

<400> 1956

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1957
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v15

<400> 1957

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

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Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1958
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v16
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<400> 1958

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
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180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1959
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v17

<400> 1959

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Val Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1960
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v18

<400>  1960

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Asp Lys Thr Ile Ile Gln
```

35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1961

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v19

<400> 1961

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Glu Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1962
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v20

<400>  1962

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Ile Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val Arg Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
```

85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1963
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v21

<400> 1963

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Glu Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln Arg Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
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Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1964
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v22

<400> 1964

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1965
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v23

<400> 1965

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Gly
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Glu Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1966
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v24
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<400> 1966

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Ile Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
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180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1967
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v25

<400> 1967

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Arg Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1968
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v26

<400>  1968

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
```

35 40 45

Phe Val His Gly Val Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1969

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v27

<400> 1969

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1970
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v28

<400> 1970

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Gly Met Glu Val Lys Thr Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys

85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1971
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v29

<400> 1971

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Ser Gly Ser
1 5 10 15

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1972
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v30

<400> 1972

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1973
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v31

<400> 1973

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1974
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v32
```

<400> 1974

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
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180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1975
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v33

<400> 1975

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1976
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v34

<400>  1976

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
```

35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1977

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v35

<400> 1977

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ser Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

```
Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1978
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v36

<400>  1978

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
```

85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Met Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1979
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v37

<400> 1979

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
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Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1980
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v38

<400> 1980

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Pro Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1981
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v39

<400> 1981

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1982
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v40
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<400> 1982

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Arg Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
```

180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1983
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v41

<400> 1983

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1984
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v42

<400>  1984

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
```

35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Val Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1985

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v43

<400> 1985

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Gly Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1986
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v44

<400> 1986

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys

85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1987
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v45

<400> 1987

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1988
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v46

<400> 1988

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1989
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v47

<400> 1989

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1990
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v48
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<400> 1990

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
```

180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1991
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v49

<400> 1991

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1992
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v50

<400>  1992

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
```

35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1993

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v51

<400> 1993

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
        35                  40                  45


Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1994
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v52

<400> 1994

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Ala Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val Tyr Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys

85 90 95

Met Ile Gly Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1995
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v53

<400> 1995

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Leu Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Thr Ile Ile Gln
        35                  40                  45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1996
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v54

<400> 1996

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1997
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v55

<400> 1997

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Thr Val Tyr Trp Glu Met Glu Asp Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  1998
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v56
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<400> 1998

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Gly Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
```

180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 1999
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v57

<400> 1999

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Asp Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Pro Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  2000
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v58

<400>  2000

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
```

35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 2001

<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v59

<400> 2001

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Gly Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Asp Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160
```

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 2002
<211> 222
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v60

<400> 2002

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys

85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp
115 120 125

Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro
130 135 140

Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly
145 150 155 160

Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val
165 170 175

Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys
180 185 190

Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val
195 200 205

Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 2003
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v61

<400> 2003

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Leu Glu Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205
```

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 2004
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v62

<400> 2004

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Leu Glu Cys Glu Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys

130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 2005
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v63

<400> 2005

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Ile Ile Glu Cys Lys Phe Pro Val Gly Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Ile Ile Ile Gln
35 40 45

Phe Ala His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Lys Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  2006
<211>  221
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v64
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<400> 2006

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Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Lys Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            100                 105                 110


Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
```

180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 2007
<211> 221
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 ECD v65

<400> 2007

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Arg Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Thr Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Ile Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
100 105 110

```
Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
        115                 120                 125


Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
    130                 135                 140


Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
145                 150                 155                 160


Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
                165                 170                 175


Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
            180                 185                 190


Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
        195                 200                 205


Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
    210                 215                 220


<210>  2008
<211>  222
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 ECD v66

<400>  2008

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Leu Glu Cys Lys Phe Pro Val Glu Glu Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
```

35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Arg Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp
115 120 125

Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro
130 135 140

Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly
145 150 155 160

Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val
165 170 175

Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys
180 185 190

Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val
195 200 205

Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
210 215 220

<210> 2009

<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Signal Peptide

<400> 2009

Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly
1   5   10   15

Val Ser Ala

<210> 2010
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Flag tag

<400> 2010

Asp Tyr Lys Asp Asp Asp Asp Lys
1   5

<210> 2011
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> His tag

<400> 2011

His His His His His His
1   5

<210> 2012
<211> 133
<212> PRT

<213> Artificial Sequence

<220>
<223> Wildtype PD-L1 SIP

<400> 2012

Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly
1   5   10   15

Val Ser Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu
            20   25   30

Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln
        35   40   45

Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn
    50   55   60

Ile Ile Gln Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser
65   70   75   80

Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly
                85   90   95

Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val
            100   105   110

Tyr Arg Cys Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr
        115   120   125

Val Lys Val Asn Ala
    130

<210> 2013
<211> 134
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 v60 SIP

<400> 2013

Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly
1   5   10   15

Val Ser Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu
            20   25   30

Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln
        35   40   45

Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp
    50   55   60

Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser
65   70   75   80

Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly
                85   90   95

Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val
            100   105   110

Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile
        115   120   125

Thr Val Lys Val Asn Ala
    130

<210> 2014
<211> 68
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8 hinge and transmembrane domain

<400> 2014

Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
1   5   10   15

Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala
            20   25   30

Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile
        35   40   45

Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
    50   55   60

Leu Val Ile Thr
65

<210> 2015
<211> 431
<212> PRT
<213> Artificial Sequence

<220>
<223> antiCD19 chimeric antigen receptor CAR-2

<400> 2015

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1   5   10   15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35   40   45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

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Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65                  70                  75                  80


Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85                  90                  95


Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
            100                 105                 110


Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
        115                 120                 125


Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
    130                 135                 140


Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160


Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175


Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190


Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205


Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
    210                 215                 220


Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225                 230                 235                 240


Val Thr Val Ser Ser Ala Ser Ala Lys Pro Thr Thr Thr Pro Ala Pro
                245                 250                 255
```

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Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
            260                 265                 270

Arg Pro Glu Ala Ser Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
        275                 280                 285

Gly Leu Asp Phe Ala Ser Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
    290                 295                 300

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Arg
305                 310                 315                 320

Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln
                325                 330                 335

Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp
            340                 345                 350

Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro
        355                 360                 365

Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp
    370                 375                 380

Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg
385                 390                 395                 400

Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr
                405                 410                 415

Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            420                 425                 430
```

<210> 2016
<211> 707
<212> PRT

<213> Artificial Sequence

<220>
<223> antiCD19 chimeric antigen receptor CAR-2

<400> 2016

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu
20 25 30

Ser Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr
50 55 60

Val Lys Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
85 90 95

Ser Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
115 120 125

Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
130 135 140

Lys Gly Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro
145 150 155 160

Ser Gln Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro

```
                165                 170                 175

Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu
            180                 185                 190

Trp Leu Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala
        195                 200                 205

Leu Lys Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val
    210                 215                 220

Phe Leu Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr
225                 230                 235                 240

Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp
                245                 250                 255

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser Ala Lys Pro Thr
            260                 265                 270

Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser
        275                 280                 285

Gln Pro Leu Ser Leu Arg Pro Glu Ala Ser Arg Pro Ala Ala Gly Gly
    290                 295                 300

Ala Val His Thr Arg Gly Leu Asp Phe Ala Ser Asp Ile Tyr Ile Trp
305                 310                 315                 320

Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile
                325                 330                 335

Thr Leu Tyr Cys Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala
            340                 345                 350

Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg
```

```
        355                 360                 365

Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu
    370                 375                 380

Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn
385                 390                 395                 400

Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met
                405                 410                 415

Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly
            420                 425                 430

Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala
        435                 440                 445

Leu Pro Pro Arg Gly Ser Gly Glu Gly Arg Gly Ser Leu Leu Thr Cys
    450                 455                 460

Gly Asp Val Glu Glu Asn Pro Gly Pro Ser Arg Ser Glu Leu Ile Lys
465                 470                 475                 480

Glu Asn Met His Met Lys Leu Tyr Met Glu Gly Thr Val Asp Asn His
                485                 490                 495

His Phe Lys Cys Thr Ser Glu Gly Glu Gly Lys Pro Tyr Glu Gly Thr
            500                 505                 510

Gln Thr Met Arg Ile Lys Val Val Glu Gly Gly Pro Leu Pro Phe Ala
        515                 520                 525

Phe Asp Ile Leu Ala Thr Ser Phe Leu Tyr Gly Ser Lys Thr Phe Ile
    530                 535                 540

Asn His Thr Gln Gly Ile Pro Asp Phe Phe Lys Gln Ser Phe Pro Glu
```

545 550 555 560

Gly Phe Thr Trp Glu Arg Val Thr Thr Tyr Glu Asp Gly Gly Val Leu
565 570 575

Thr Ala Thr Gln Asp Thr Ser Leu Gln Asp Gly Cys Leu Ile Tyr Asn
580 585 590

Val Lys Ile Arg Gly Val Asn Phe Thr Ser Asn Gly Pro Val Met Gln
595 600 605

Lys Lys Thr Leu Gly Trp Glu Ala Phe Thr Glu Thr Leu Tyr Pro Ala
610 615 620

Asp Gly Gly Leu Glu Gly Arg Asn Asp Met Ala Leu Lys Leu Val Gly
625 630 635 640

Gly Ser His Leu Ile Ala Asn Ile Lys Thr Thr Tyr Arg Ser Lys Lys
645 650 655

Pro Ala Lys Asn Leu Lys Met Pro Gly Val Tyr Tyr Val Asp Tyr Arg
660 665 670

Leu Glu Arg Ile Lys Glu Ala Asn Asn Glu Thr Tyr Val Glu Gln His
675 680 685

Glu Val Ala Val Ala Arg Tyr Cys Asp Leu Pro Ser Lys Leu Gly His
690 695 700

Lys Leu Asn
705

<210> 2017
<211> 8708
<212> DNA
<213> Artificial Sequence

<220>
<223> anti-CD19 chimeric antigen receptor CAR-2

<400> 2017
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caacatgcct tacaaggaga gaaaaagcac cgtgcatgcc gattggtgga agtaaggtgg 120

tacgatcgtg ccttattagg aaggcaacag acgggtctga catggattgg acgaaccact 180

gaattgccgc attgcagaga tattgtattt aagtgcctag ctcgatacaa taaacgggtc 240

tctctggtta gaccagatct gagcctggga gctctctggc taactaggga acccactgct 300

taagcctcaa taaagcttgc cttgagtgct tcaagtagtg tgtgcccgtc tgttgtgtga 360

ctctggtaac tagagatccc tcagaccctt ttagtcagtg tggaaaatct ctagcagtgg 420

cgcccgaaca gggacttgaa agcgaaaggg aaaccagagg agctctctcg acgcaggact 480

cggcttgctg aagcgcgcac ggcaagaggc gaggggcggc gactggtgag tacgccaaaa 540

attttgacta gcggaggcta gaaggagaga gatgggtgcg agagcgtcag tattaagcgg 600

gggagaatta gatcgcgatg ggaaaaaatt cggttaaggc caggggaaa gaaaaaatat 660

aaattaaaac atatagtatg ggcaagcagg gagctagaac gattcgcagt taatcctggc 720

ctgttagaaa catcagaagg ctgtagacaa atactgggac agctacaacc atcccttcag 780

acaggatcag aagaacttag atcattatat aatacagtag caaccctcta ttgtgtgcat 840

caaaggatag agataaaaga caccaaggaa gctttagaca agatagagga agagcaaaac 900

aaaagtaaga ccaccgcaca gcaagcggcc gctgatcttc agacctggag gaggagatat 960

gagggacaat tggagaagtg aattatataa atataaagta gtaaaaattg aaccattagg 1020

agtagcaccc accaaggcaa agagaagagt ggtgcagaga gaaaaaagag cagtgggaat 1080

aggagctttg ttccttgggt tcttgggagc agcaggaagc actatgggcg cagcctcaat 1140

gacgctgacg gtacaggcca gacaattatt gtctggtata gtgcagcagc agaacaattt 1200

gctgagggct attgaggcgc aacagcatct gttgcaactc acagtctggg gcatcaagca 1260

gctccaggca agaatcctgg ctgtggaaag atacctaaag gatcaacagc tcctggggat 1320

ttggggttgc tctggaaaac tcatttgcac cactgctgtg ccttggaatg ctagttggag 1380

taataaatct ctggaacaga tttggaatca cacgacctgg atggagtggg acagagaaat 1440

taacaattac acaagcttaa tacactcctt aattgaagaa tcgcaaaacc agcaagaaaa 1500

gaatgaacaa gaattattgg aattagataa atgggcaagt ttgtggaatt ggtttaacat 1560

aacaaattgg ctgtggtata taaaattatt cataatgata gtaggaggct tggtaggttt 1620

aagaatagtt tttgctgtac tttctatagt gaatagagtt aggcagggat attcaccatt 1680

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agaaggtgga gagagagaca gagacagatc cattcgatta gtgaacggat ctcgacggta 1800

tcggttaact tttaaaagaa aaggggggat tgggggggtac agtgcagggg aaagaatagt 1860

agacataata gcaacagaca tacaaactaa agaattacaa aaacaaatta caaaaattca 1920

aaattttatc gatcacgaga ctagcctcga gaagcttgat atcgaattcc cacggggttg 1980

gacgcgtagg aacagagaaa caggagaata tgggccaaac aggatatctg tggtaagcag 2040

ttcctgcccc ggctcagggc caagaacagt tggaacagca gaatatgggc caaacaggat 2100

atctgtggta agcagttcct gccccggctc agggccaaga acagatggtc cccagatgcg 2160

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cctggaatgg ctgggagtga tctggggcag cgagacaacc tactacaaca gcgccctgaa 3060

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gcccaccacg acgccagcgc cgcgaccacc aacaccggcg cccaccatcg cgtcgcagcc 3300

cctgtccctg cgcccagagg cgagccggcc agcggcgggg ggcgcagtgc acacgagggg 3360

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ggagtacgat gttttggaca agagacgtgg ccgggaccct gagatggggg gaaagccgag 3600

aaggaagaac cctcaggaag gcctgtacaa tgaactgcag aaagataaga tggcggaggc 3660

ctacagtgag attgggatga aaggcgagcg ccggaggggc aaggggcacg atggccttta 3720

ccagggtctc agtacagcca ccaaggacac ctacgacgcc cttcacatgc aggccctgcc 3780

ccctcgcggc agtggcgagg gcagaggaag tctgctaaca tgcggtgacg tggaggagaa 3840

tccgggcccc tctagaagcg agctgattaa ggagaacatg cacatgaagc tgtacatgga 3900

gggcaccgtg gacaaccatc acttcaagtg cacatccgag ggcgaaggca agccctacga 3960

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ccccgacttc ttcaagcagt ccttccctga gggcttcaca tgggagagag tcaccacata 4140

cgaagacggg ggcgtgctga ccgctaccca ggacaccagc ctccaggacg gctgcctcat 4200

ctacaacgtc aagatcagag gggtgaactt cacatccaac ggccctgtga tgcagaagaa 4260

aacactcggc tgggaggcct tcaccgagac gctgtacccc gctgacggcg gcctggaagg 4320

cagaaacgac atggccctga agctcgtggg cgggagccat ctgatcgcaa acatcaagac 4380

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caatcaacct ctggattaca aaatttgtga aagattgact ggtattctta actatgttgc 4620

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tatggctttc attttctcct ccttgtataa atcctggttg ctgtctcttt atgaggagtt 4740

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gataaagttg caggaccact tctgcgctcg gcccttccgg ctggctggtt tattgctgat 7320

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atgcttccgg ctcgtatgtt gtgtggaatt gtgagcggat aacaatttca cacaggaaac 8640

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<210> 2018
<211> 428
<212> PRT
<213> Artificial Sequence

<220>
<223> antiCD19 chimeric antigen receptor CAR-1

<400> 2018

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
100 105 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys

```
        115                 120                 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
    130                 135                 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145                 150                 155                 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
                165                 170                 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
            180                 185                 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
        195                 200                 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
    210                 215                 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225                 230                 235                 240

Val Thr Val Ser Ser Ala Ser Ala Lys Pro Thr Thr Thr Pro Ala Pro
                245                 250                 255

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
            260                 265                 270

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
        275                 280                 285

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
    290                 295                 300

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Arg Val Lys Phe
```

305 310 315 320

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
325 330 335

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
340 345 350

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
355 360 365

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
370 375 380

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
385 390 395 400

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
405 410 415

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
420 425

<210> 2019
<211> 706
<212> PRT
<213> Artificial Sequence

<220>
<223> antiCD19 chimeric antigen receptor CAR-1

<400> 2019

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gly Ser Asp Ile Gln Met Thr Gln Thr Thr Ser
20 25 30

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Ser Leu Ser Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala
        35                  40                  45

Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp
    50                  55                  60

Gly Thr Val Lys Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly
65                  70                  75                  80

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu
                85                  90                  95

Thr Ile Ser Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln
            100                 105                 110

Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu
        115                 120                 125

Ile Thr Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly
    130                 135                 140

Ser Thr Lys Gly Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val
145                 150                 155                 160

Ala Pro Ser Gln Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser
                165                 170                 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly
            180                 185                 190

Leu Glu Trp Leu Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn
        195                 200                 205

Ser Ala Leu Lys Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser
    210                 215                 220
```

```
Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile
225                 230                 235                 240


Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
                245                 250                 255


Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser Ala Lys
            260                 265                 270


Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile
        275                 280                 285


Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala
    290                 295                 300


Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr
305                 310                 315                 320


Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu
                325                 330                 335


Val Ile Thr Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
            340                 345                 350


Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
        355                 360                 365


Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
    370                 375                 380


Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
385                 390                 395                 400


Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
                405                 410                 415
```

```
Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
            420                 425                 430

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
        435                 440                 445

Pro Pro Arg Gly Gly Arg Ser Gly Glu Gly Arg Gly Ser Leu Leu Thr
    450                 455                 460

Cys Gly Asp Val Glu Glu Asn Pro Gly Pro Ser Arg Ser Glu Leu Ile
465                 470                 475                 480

Lys Glu Asn Met His Met Lys Leu Tyr Met Glu Gly Thr Val Asp Asn
                485                 490                 495

His His Phe Lys Cys Thr Ser Glu Gly Glu Gly Lys Pro Tyr Glu Gly
            500                 505                 510

Thr Gln Thr Met Arg Ile Lys Val Val Glu Gly Gly Pro Leu Pro Phe
        515                 520                 525

Ala Phe Asp Ile Leu Ala Thr Ser Phe Leu Tyr Gly Ser Lys Thr Phe
    530                 535                 540

Ile Asn His Thr Gln Gly Ile Pro Asp Phe Phe Lys Gln Ser Phe Pro
545                 550                 555                 560

Glu Gly Phe Thr Trp Glu Arg Val Thr Thr Tyr Glu Asp Gly Gly Val
                565                 570                 575

Leu Thr Ala Thr Gln Asp Thr Ser Leu Gln Asp Gly Cys Leu Ile Tyr
            580                 585                 590

Asn Val Lys Ile Arg Gly Val Asn Phe Thr Ser Asn Gly Pro Val Met
        595                 600                 605
```

Gln Lys Lys Thr Leu Trp Glu Ala Phe Thr Glu Thr Leu Tyr Pro Ala
610 615 620

Asp Gly Gly Leu Glu Gly Arg Asn Asp Met Ala Leu Lys Leu Val Gly
625 630 635 640

Gly Ser His Leu Ile Ala Asn Ile Lys Thr Thr Tyr Arg Ser Lys Lys
645 650 655

Pro Ala Lys Asn Leu Lys Met Pro Gly Val Tyr Tyr Val Asp Tyr Arg
660 665 670

Leu Glu Arg Ile Lys Glu Ala Asn Asn Glu Thr Tyr Val Glu Gln His
675 680 685

Glu Val Ala Ala Arg Tyr Cys Asp Leu Pro Ser Lys Leu Gly His Lys
690 695 700

Leu Asn
705

<210> 2020
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Blue fluorescent protein

<400> 2020

Ser Arg Ser Glu Leu Ile Lys Glu Asn Met His Met Lys Leu Tyr Met
1 5 10 15

Glu Gly Thr Val Asp Asn His His Phe Lys Cys Thr Ser Glu Gly Glu
20 25 30

Gly Lys Pro Tyr Glu Gly Thr Gln Thr Met Arg Ile Lys Val Val Glu

```
        35                  40                  45

Gly Gly Pro Leu Pro Phe Ala Phe Asp Ile Leu Ala Thr Ser Phe Leu
    50                  55                  60

Tyr Gly Ser Lys Thr Phe Ile Asn His Thr Gln Gly Ile Pro Asp Phe
65                  70                  75                  80

Phe Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Val Thr Thr
                85                  90                  95

Tyr Glu Asp Gly Gly Val Leu Thr Ala Thr Gln Asp Thr Ser Leu Gln
            100                 105                 110

Asp Gly Cys Leu Ile Tyr Asn Val Lys Ile Arg Gly Val Asn Phe Thr
        115                 120                 125

Ser Asn Gly Pro Val Met Gln Lys Lys Thr Leu Trp Glu Ala Phe Thr
    130                 135                 140

Glu Thr Leu Tyr Pro Ala Asp Gly Gly Leu Glu Gly Arg Asn Asp Met
145                 150                 155                 160

Ala Leu Lys Leu Val Gly Gly Ser His Leu Ile Ala Asn Ile Lys Thr
                165                 170                 175

Thr Tyr Arg Ser Lys Lys Pro Ala Lys Asn Leu Lys Met Pro Gly Val
            180                 185                 190

Tyr Tyr Val Asp Tyr Arg Leu Glu Arg Ile Lys Glu Ala Asn Asn Glu
        195                 200                 205

Thr Tyr Val Glu Gln His Glu Val Ala Ala Arg Tyr Cys Asp Leu Pro
    210                 215                 220

Ser Lys Leu Gly His Lys Leu Asn
```

225 230

<210> 2021
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> T2A

<400> 2021

Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2022
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v1 ECD

<400> 2022

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu

65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2023
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v2 ECD

<400> 2023

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Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2024
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v3 ECD

<400> 2024

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu

85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2025
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v4 ECD

<400> 2025

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Leu Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Pro Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2026
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v5 ECD

<400> 2026

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val

100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2027
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v6 ECD

<400> 2027

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

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Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Cys Pro Arg Pro Asn Val Cys Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
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```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2028
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v7 ECD

<400>  2028

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
```

115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2029
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v8 ECD

<400> 2029

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Asp Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Ala Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2030
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v9 ECD

<400>  2030

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
```

130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Ala Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2031
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v10 ECD

<400> 2031

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Arg Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2032
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v11 ECD

<400> 2032

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Gly Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
```

145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2033
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v12 ECD

<400> 2033

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Tyr Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2034
<211>  238
<212>  PRT
```

<213> Artificial Sequence

<220>
<223> ICOSL v13 ECD

<400> 2034

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
```

165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2035
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v14 ECD

<400> 2035

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2036
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v15 ECD
```

<400> 2036

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Gly Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Cys Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
```

180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2037
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v16 ECD

<400> 2037

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Cys Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2038
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v17 ECD

<400>  2038

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
```

```
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
```

195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2039
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v18 ECD

<400> 2039

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Cys Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2040
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v19 ECD

<400>  2040

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
```

```
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

Pro Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
```

210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2041
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v20 ECD

<400> 2041

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Pro Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2042
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v21 ECD

<400> 2042

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
```

```
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Glu Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
```

225 230 235

<210> 2043
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v22 ECD

<400> 2043

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ala Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2044
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v23 ECD

<400>  2044

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asp Ser Pro Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
```

```
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235

<210>  2045
```

<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v24 ECD

<400> 2045

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Lys Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Pro
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2046
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v25 ECD

<400>  2046

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
```

65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val His Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2047
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v26 ECD

<400> 2047

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Ala Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2048
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v27 ECD

<400>  2048

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
```

85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Thr Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2049
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v28 ECD

<400> 2049

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Pro
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2050
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v29 ECD

<400> 2050

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val

100 105 110

Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val His Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Ser Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2051
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v30 ECD

<400> 2051

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Pro Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2052
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v31 ECD

<400>  2052

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
```

115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Gly Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2053
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v32 ECD

<400> 2053

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser His Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2054
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v33 ECD

<400>  2054

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Asp Cys Phe
                85                  90                  95


Val Phe Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
```

130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2055
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v34 ECD

<400> 2055

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Asp Cys Phe
                85                  90                  95

Val Phe Ser Arg Ser Leu Glu Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2056
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL WT IgV

<400> 2056

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2057
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v1 IgV

<400> 2057

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2058
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v2 IgV

<400>  2058

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
```

35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2059
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v3 IgV

<400> 2059

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2060
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v4 IgV

<400>  2060

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2061
```

<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v5 IgV

<400> 2061

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2062
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v10 IgV

<400> 2062

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu

1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Arg Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2063
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v11 IgV

<400> 2063

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Gly Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2064
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v12 IgV

<400>  2064

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Tyr Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
```

85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2065
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v13 IgV

<400> 2065

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2066
<211> 111
<212> PRT

<213> Artificial Sequence

<220>
<223> ICOSL v14 IgV

<400> 2066

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2067
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v22 IgV

<400> 2067

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Asn Ser Ala Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2068
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v23 IgV

<400> 2068

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Asp Ser Pro Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn

50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2069
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v24 IgV

<400> 2069

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Lys Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2070
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v28 IgV

<400> 2070

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Pro
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2071
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v30 IgV

<400> 2071

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2072
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v33 IgV

<400> 2072

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val

20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Asp Cys Phe
85 90 95

Val Phe Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2073
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v34 IgV

<400> 2073

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Asp Cys Phe
                85                  90                  95


Val Phe Ser Arg Ser Leu Glu Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2074
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v35 ECD

<400>  2074

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Glu Phe Gln Glu Val Leu Ser Val Glu Val
```

100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2075
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v35 IgV

<400> 2075

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Glu Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2076
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v36 ECD

<400> 2076

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn

50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Leu Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2077

<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v37 ECD

<400> 2077

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2078
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v38 ECD

<400> 2078

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu

65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2079
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v39 ECD

<400> 2079

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2080
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v40 ECD

<400> 2080

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu

85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2081
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v41 ECD

<400> 2081

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2082
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v42 ECD

<400> 2082

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val

100 105 110

Thr Leu His Val Ala Ala Asn Phe Gly Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2083
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v43 ECD

<400> 2083

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

```
Leu Ser Cys Val Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Gly Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2084
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v44 ECD

<400>  2084

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
```

115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2085
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v45 ECD

<400> 2085

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Ser Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Ser Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2086
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v46 ECD

<400> 2086

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Ala Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn

130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2087
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v47 ECD

<400> 2087

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2088
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v48 ECD

<400> 2088

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
```

145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2089
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v49 ECD

<400> 2089

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2090
<211>  238
<212>  PRT
```

<213> Artificial Sequence

<220>
<223> ICOSL v50 ECD

<400> 2090

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Ala Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
```

165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2091
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v51 ECD

<400> 2091

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Arg Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2092
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v52 ECD
```

<400> 2092

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Thr Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Thr Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
```

180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2093
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v53 ECD

<400> 2093

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Gly Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2094
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v54 ECD

<400>  2094

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
```

```
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr His His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Ala Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
```

195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2095
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v55 ECD

<400> 2095

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Phe Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Thr Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2096
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v56 ECD

<400>  2096

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Val
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
```

```
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Cys Trp Ile Asn Met Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
```

210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2097
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v57 ECD

<400> 2097

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Arg Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Phe Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Val Ile Gly Glu Gly Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2098
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v58 ECD

<400> 2098

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
```

```
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
```

225 230 235

<210> 2099
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v59 ECD

<400> 2099

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Ala Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Met Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Gly
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2100
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v60 ECD

<400>  2100

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Ser Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
```

50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2101

<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v61 ECD

<400> 2101

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Asn Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Gln Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2102
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v62 ECD

<400>  2102

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Arg Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
```

65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Leu His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Val Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Gly Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2103
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v63 ECD

<400> 2103

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Thr Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Cys Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Leu Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2104
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v64 ECD

<400> 2104

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Glu Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile

85 90 95

Val Phe Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asp Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Ala Gly Ser Gln Thr Gly Asn Asp Thr Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2105
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v65 ECD

<400> 2105

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Met Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2106
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v66 ECD

<400> 2106

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val

100 105 110

Thr Leu His Val Ala Ala Asn Ile Ser Val Pro Val Val Thr Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Arg Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Asn Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2107
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v67 ECD

<400> 2107

Asp Thr Gln Glu Lys Glu Val Arg Ala Val Val Gly Ser Asp Val Glu
1 5 10 15

```
Leu Arg Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Arg Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Ser Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Phe Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2108
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v68 ECD

<400>  2108

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Gly Arg Phe Asp Leu Asp Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
```

115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Lys Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2109
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v69 ECD

<400> 2109

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Pro Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Gly Ile Gly Glu Lys Asp Lys Ile
    210                 215                 220
```

```
Ser Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2110
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v70 ECD

<400>  2110

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu His Val Thr Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
```

130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Ser Pro Ser
180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2111
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v71 ECD

<400> 2111

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2112
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v72 ECD

<400> 2112

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Gly Arg Cys Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Lys Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
```

145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Ser Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2113
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v73 ECD

<400> 2113

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Ala Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Ile Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2114
<211>  238
<212>  PRT
```

<213> Artificial Sequence

<220>
<223> ICOSL v74 ECD

<400> 2114

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Ile Val Gly Gly Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Gly Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Ala Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


Pro Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Val Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
```

165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Met Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2115
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v75 ECD

<400> 2115

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Cys Phe Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2116
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v76 ECD
```

<400> 2116

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
```

180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2117
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v77 ECD

<400> 2117

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

```
Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asp
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2118
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v78 ECD

<400>  2118

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
```

```
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Leu
                85                  90                  95

Val Phe Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
```

195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2119
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v79 ECD

<400> 2119

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Ala Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2120
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v80 ECD

<400>  2120

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
```

```
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
```

210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2121
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v81 ECD

<400> 2121

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
115 120 125

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Val Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Val
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2122
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v36 IgV

<400>  2122

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
```

35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Leu Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2123
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v37 IgV

<400> 2123

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
            100                 105                 110


<210>  2124
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v38  IgV

<400>  2124

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
            100                 105                 110


<210>  2125
```

<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v39 IgV

<400> 2125

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2126
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v40 IgV

<400> 2126

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu

1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
100 105 110

<210> 2127
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v41 IgV

<400> 2127

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2128
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v43  IgV

<400>  2128

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Val Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
```

85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Gly Val Glu
100 105 110

<210> 2129
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v44 IgV

<400> 2129

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2130
<211> 111
<212> PRT

<213> Artificial Sequence

<220>
<223> ICOSL v48 IgV

<400> 2130

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2131
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v50 IgV

<400> 2131

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Ala Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2132
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v51  IgV

<400>  2132

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
```

50 55 60

Arg Ala Leu Met Ser Pro Ala Arg Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2133
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v60 IgV

<400> 2133

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Ser Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu
100 105 110

<210> 2134
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v78 IgV

<400> 2134

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Leu
85 90 95

Val Phe Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2135
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v79 IgV

<400> 2135

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Ala Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2136
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v80 IgV

<400> 2136

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val

20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2137
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v81 ECD

<400> 2137

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Gly Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2138
<211>  238
<212>  PRT
```

<213> Artificial Sequence

<220>
<223> ICOSL v82 ECD

<400> 2138

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
```

165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2139
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v83 ECD

<400> 2139

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asp Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2140
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v84 ECD
```

<400> 2140

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Arg Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
```

180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2141
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v85 ECD

<400> 2141

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Pro Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2142
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v86 ECD

<400>  2142

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
```

```
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Pro Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asp Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
```

195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2143
<211> 237
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v87 ECD

<400> 2143

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Val Thr
100 105 110

```
Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro His
        115                 120                 125


Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn Gly
    130                 135                 140


Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser Leu
145                 150                 155                 160


Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg Gly
                165                 170                 175


Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser Val
            180                 185                 190


Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu Thr
        195                 200                 205


Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile Thr
    210                 215                 220


Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2144
<211>  237
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v88 ECD

<400>  2144

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
```

```
            20                  25                  30

Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His Ile
        35                  40                  45

Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn Arg
    50                  55                  60

Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu Arg
65                  70                  75                  80

Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu Val
                85                  90                  95

Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val Thr
            100                 105                 110

Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro His
        115                 120                 125

Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn Gly
    130                 135                 140

Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser Leu
145                 150                 155                 160

Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg Gly
                165                 170                 175

Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser Val
            180                 185                 190

Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu Thr
        195                 200                 205

Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile Thr
```

210 215 220

Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2145
<211> 237
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v89 ECD

<400> 2145

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Thr Ser Ile Asn Gly
    130                 135                 140


Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser Leu
145                 150                 155                 160


Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg Gly
                165                 170                 175


Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser Val
            180                 185                 190


Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu Thr
        195                 200                 205


Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile Ala
    210                 215                 220


Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2146
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v90 ECD

<400>  2146

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
```

```
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Leu Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
```

225 230 235

<210> 2147
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v91 ECD

<400> 2147

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2148
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v92 ECD

<400>  2148

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
```

50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Gly
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2149

<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v93 ECD

<400> 2149

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Gly Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2150
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v94 ECD

<400>  2150

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
```

65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Lys Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2151
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v96 ECD

<400> 2151

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Thr Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Thr Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Ala Pro Ser
180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2152
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v96 ECD

<400> 2152

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Ala Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Gly Glu Gln Lys Phe His Cys Leu

85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2153
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v97 ECD

<400> 2153

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Phe Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Thr Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2154
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v98 ECD

<400> 2154

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Ile Leu Ser Asp Glu Val

100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Phe Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Gly Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2155
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v85 IgV

<400> 2155

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Pro Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2156
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v86  IgV

<400>  2156

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Pro Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asp Val Asp Ser Arg Tyr Arg Asn
```

50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2157
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v87 IgV

<400> 2157

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val
100 105 110

<210> 2158
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v88 IgV

<400> 2158

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His Ile
35 40 45

Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn Arg
50 55 60

Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu Arg
65 70 75 80

Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu Val
85 90 95

Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2159
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v91 IgV

<400> 2159

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
            100   105   110

<210> 2160
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v99 ECD

<400> 2160

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val

```
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
```

210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2161
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v100 ECD

<400> 2161

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2162
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v101 ECD

<400>  2162

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
```

```
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
```

225 230 235

<210> 2163
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v102 ECD

<400> 2163

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2164
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v103 ECD


<220>
<221>  VARIANT
<222>  (207)..(207)
<223>  X = N or Q

<400>  2164

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Xaa Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2165
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v104 ECD


<220>
<221>  VARIANT
<222>  (168)..(168)
<223>  X = N or Q

<220>
<221>  VARIANT
<222>  (207)..(207)
<223>  X = N or Q

<400>  2165

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Xaa Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Xaa Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2166
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v105 ECD

<400> 2166

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2167
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v106 ECD

<400> 2167

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2168
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v107 ECD

<400>  2168

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2169
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v108 ECD

<400>  2169

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2170
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v109 ECD

<400> 2170

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2171
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v110 ECD


<220>
<221>  VARIANT
<222>  (155)..(155)
<223>  X = N or Q

<400>  2171

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110
```

```
Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Xaa Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2172
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v111 ECD

<400>  2172

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2173
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v112 ECD

<400>  2173

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2174
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v113 ECD

<400> 2174

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2175
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL V114 ECD

<400> 2175

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140
```

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2176
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v115 ECD

<400>  2176

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2177
<211> 238

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v116 ECD

<400> 2177

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2178
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v117 ECD

<400>  2178

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2179
<211> 238
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v118 ECD

<400> 2179

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile His Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2180
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v119 ECD

<400> 2180

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2181
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v120 ECD

<400> 2181

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2182
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v121 ECD

<400> 2182

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2183
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v122 ECD

<400>  2183

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205
```

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2184
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v123 ECD

<400> 2184

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile His Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2185
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v124 ECD

<400> 2185

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2186
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v125 ECD

<400> 2186

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2187
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v126 ECD

<400>  2187

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2188
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v127 ECD

<220>
<221> VARIANT
<222> (168)..(168)
<223> X = N or Q

<220>
<221> VARIANT
<222> (207)..(207)
<223> X = N or Q

<400> 2188

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110
```

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Xaa Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Xaa Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2189
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v128 ECD


<220>
<221>  VARIANT
<222>  (155)..(155)
<223>  X = N or Q

<220>
```

<221> VARIANT
<222> (168)..(168)
<223> X = N or Q

<400> 2189

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Xaa Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Xaa Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2190
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v129 ECD

<400>  2190

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2191
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v131 ECD

<400> 2191

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

```
Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2192
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v131 ECD

<400>  2192

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2193
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v132 ECD

<400>  2193

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205
```

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2194
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v133 ECD

<400> 2194

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2195
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v134 ECD

<400>  2195

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2196
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v135 ECD

<400>  2196

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2197
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v136 ECD

<400> 2197

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Gln Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Gln Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Gln Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2198
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v99 IgV

<400> 2198

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2199
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v111 IgV

<400> 2199

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2200
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v137 ECD

<400> 2200

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2201
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v138 ECD

<400> 2201

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Leu Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Pro Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2202
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v139 ECD

<400>  2202

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Tyr Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Leu Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Pro Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2203
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v140 ECD

<400> 2203

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115   120   125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130   135   140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145   150   155   160

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2204
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v141 ECD

<400>  2204

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Leu Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Pro Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2205
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v142 ECD

<400> 2205

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Leu Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2206
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v143 ECD

<400> 2206

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Pro Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2207
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v137 IgV

<400> 2207

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2208
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v144 ECD

<400> 2208

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2209
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v145 ECD

<400> 2209

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2210
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v146 ECD

<400>  2210

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2211
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v147 ECD

<400> 2211

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Val Asn
130 135 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2212
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v148 ECD

<400>  2212

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Arg Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2213
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v149 ECD

<400> 2213

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Ala Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2214
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v150 ECD

<400>  2214

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asp Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2215
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v151 ECD

<400> 2215

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

```
Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2216
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v152 ECD

<400>  2216

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2217
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v153 ECD

<400>  2217

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2218
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v154 ECD

<400>  2218

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110
```

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115   120   125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130   135   140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145   150   155   160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165   170   175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180   185   190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195   200   205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210   215   220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225   230   235

<210> 2219
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v155 ECD

<400> 2219

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Val
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2220
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v156 ECD

<400>  2220

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2221
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v157 ECD

<400> 2221

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2222
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v158 ECD

<400> 2222

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Thr Asn
    130                 135                 140
```

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145 150 155 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
165 170 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2223
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v159 ECD

<400> 2223

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2224
<211> 238

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v160 ECD

<400> 2224

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2225
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v161 ECD

<400>  2225

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Val
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2226
<211> 238
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v162 ECD

<400> 2226

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Val
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Cys Trp Ile Asn Met Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2227
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v163 ECD

<400>  2227

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2228
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v164 ECD

<400> 2228

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2229
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v165 ECD

<400> 2229

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Ile Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2230
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v166 ECD

<400>  2230

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2231
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v167 ECD

<400>  2231

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asp Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2232
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v168 ECD

<400> 2232

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Ser Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Val Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2233
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v169 ECD

<400> 2233

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2234
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v170 ECD

<400>  2234

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2235
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v171 ECD

<400> 2235

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2236
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v172 ECD

<400>  2236

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2237
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v173 ECD

<400> 2237

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2238
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v174 ECD

<400>  2238

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2239
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v175 ECD
```

<400> 2239

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

```
Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2240
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v176 ECD

<400>  2240

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2241
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v177 ECD


<220>
<221>  VARIANT
<222>  (115)..(115)
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<223> X is H or Q

<400> 2241

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Xaa Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2242
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v178 ECD

<400>  2242

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2243
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v179 ECD

<400> 2243

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Ser Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Arg Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2244
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> ICOSL WT IgV

<400> 2244

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2245
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v1 IgV

<400> 2245

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2246
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v2 IgV

<400> 2246

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2247
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v3 IgV

<400> 2247

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2248
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v5 IgV

<400> 2248

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2249
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v10 IgV

<400> 2249

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Arg Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2250
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v11 IgV

<400>  2250

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Gly Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2251
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v12 IgV

<400> 2251

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Tyr Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2252
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v13 IgV

<400>  2252

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2253
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v14 IgV

<400> 2253

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2254
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v21 IgV

<400> 2254

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Glu Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2255
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v22 IgV

<400> 2255

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ala Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2256
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v23 IgV

<400> 2256

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asp Ser Pro Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2257
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v28 IgV

<400>  2257

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Pro
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2258
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v33 IgV

<400>  2258

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Asp Cys Phe
                85                  90                  95

Val Phe Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2259
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v34 IgV

<400> 2259

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Asp Cys Phe
                85                  90                  95


Val Phe Ser Arg Ser Leu Glu Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Ser Ser Val
        115                 120


<210>  2260
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v35 IgV

<400>  2260

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Glu Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2261
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v36 IgV

<400> 2261

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Leu Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2262
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v37 IgV

<400> 2262

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2263
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v38 IgV

<400> 2263

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2264
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v39 IgV

<400> 2264

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2265
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v40 IgV

<400>  2265

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2266
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v41 IgV

<400>  2266

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2267
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v42 IgV

<400> 2267

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Gly Val
        115                 120


<210>  2268
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v43 IgV

<400>  2268

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Val Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Gly Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2269
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v44 IgV

<400> 2269

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2270
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v46 IgV

<400> 2270

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Ala
        115   120

<210> 2271
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v48 IgV

<400> 2271

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2272
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v49 IgV

<400> 2272

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Ser Ser Val
115 120

<210> 2273
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v50 IgV

<400> 2273

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Ala Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2274
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v51 IgV

<400>  2274

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Arg Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2275
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v52 IgV

<400> 2275

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Thr Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Thr Ala Asn Phe Ser Val
        115                 120


<210>  2276
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v54 IgV

<400>  2276

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr His His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Ala Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Ser Ser Val
115 120

<210> 2277
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v60 IgV

<400> 2277

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Ser Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2278
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v65 IgV

<400> 2278

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Met
        115   120

<210> 2279
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v78 IgV

<400> 2279

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Leu
                85                  90                  95


Val Phe Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2280
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v79 IgV

<400> 2280

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Ala Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2281
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v80 IgV

<400>  2281

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2282
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v85 IgV

<400>  2282

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

Ile Pro Gln Ser Ser Pro Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2283
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v86 IgV

<400> 2283

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Pro Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asp Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2284
<211>  121
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v87 IgV

<400>  2284

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Val Thr
100 105 110

Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2285
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v88 IgV

<400> 2285

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His Ile
35 40 45

Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn Arg
50 55 60

Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu Arg
65 70 75 80

Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu Val
85 90 95

Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val Thr
100 105 110

Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2286
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v91 IgV

<400> 2286

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2287
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v99 IgV

<400> 2287

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2288
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v100 IgV

<400> 2288

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Gln Phe Ser Val
        115                 120


<210>  2289
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v111 IgV

<400>  2289

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2290
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v112 IgV

<400>  2290

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Gln Phe Ser Val
        115                 120
```

<210> 2291
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v113 IgV

<400> 2291

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Gln Phe Ser Val
        115                 120


<210>  2292
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v126 IgV

<400>  2292

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Gln Phe Ser Val
115 120

<210> 2293
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v137 IgV

<400> 2293

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2294
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v153 IgV

<400> 2294

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2295
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v154 IgV

<400> 2295

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2296
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v163 IgV

<400> 2296

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2297
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v164 IgV

<400>  2297

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2298
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v173 IgV

<400>  2298

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2299
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v180 ECD

<400> 2299

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ala Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2300
<211> 238
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v181 ECD

<400> 2300

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ala Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2301
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v182 ECD

<400> 2301

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ala Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2302
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v183 ECD

<400>  2302
```

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asp Ser Ser Leu Glu Ala Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2303
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v184 ECD

<400> 2303

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2304
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v185 ECD

<400>  2304

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gly Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2305
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v186 ECD

<400> 2305

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2306
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v187 ECD

<400> 2306

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Met Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2307
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v188 ECD

<400> 2307

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Met Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2308
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v189 ECD

<400>  2308

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Gln Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2309
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v190 ECD

<400> 2309

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Gln Ser Ser Leu Glu Ser Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115   120   125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130   135   140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145   150   155   160

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2310
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v191 ECD

<400>  2310

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2311
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v192 ECD

<400> 2311

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2312
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v193 ECD

<400>  2312

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2313
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v194 ECD

<400> 2313

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Ala Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

```
Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2314
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v195 ECD

<400>  2314

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Glu Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2315
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v196 ECD

<400>  2315

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2316
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v197 ECD

<400> 2316

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Met Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2317
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v198 ECD

<400>  2317

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2318
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v199 ECD

<400>  2318

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Met Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2319
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v200 ECD

<400> 2319

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Val Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2320
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v201 ECD

<400> 2320

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140
```

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2321
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v202 ECD

<400>  2321

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2322
<211> 238

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v203 ECD

<400> 2322

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2323
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v204 ECD

<400>  2323

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Val Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2324
<211> 238
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v205 ECD

<400> 2324

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

```
Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2325
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v206 ECD

<400> 2325

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Lys Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2326
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v207 ECD

<400> 2326

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Leu Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2327
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v208 ECD

<400> 2327

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Asn Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2328
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v209 ECD

<400>  2328

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2329
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL V210 ECD

<400>  2329

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2330
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v211 ECD

<400> 2330

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Thr Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2331
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v212 ECD

<400> 2331

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Arg Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
115 120 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
130 135 140

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2332
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v213 ECD

<400>  2332

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Arg Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2333
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v214 ECD

<400> 2333

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Arg Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115   120   125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130   135   140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145   150   155   160

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2334
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v215 ECD

<400>  2334

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2335
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v216 ECD

<400> 2335

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175
```

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
180 185 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
195 200 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2336
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v217 ECD

<400> 2336

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Cys Ser Ser Leu Glu Glu Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2337
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v218 ECD

<400> 2337

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gly Ser Ser Leu Glu Pro Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Asp Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190
```

```
Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2338
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v219 ECD

<400>  2338

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gly Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

```
Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2339
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v220 ECD

<400>  2339

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gly Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
210 215 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225 230 235

<210> 2340
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v221 ECD

<400> 2340

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Leu Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2341
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v222 ECD

<400>  2341

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Pro Ser Ser Leu Glu Pro Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220
```

```
Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2342
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v223 ECD

<400>  2342

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Pro Ser Ser Leu Glu Ser Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125
```

```
His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2343
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v224 ECD

<400> 2343

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Ser Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2344
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v225 ECD

<400> 2344

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu Lys Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140
```

```
Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160


Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2345
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v226 ECD

<400>  2345

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Val Ser Ser Leu Glu Thr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Leu Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205

Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235
```

<210> 2346
<211> 238

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v227 ECD

<400> 2346

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Gln Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125


His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140


Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160
```

```
Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175


Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190


Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205


Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220


Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
225                 230                 235


<210>  2347
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v180 IgV

<400>  2347

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ala Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2348
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v181 IgV

<400>  2348

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ala Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2349
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v182 IgV

<400> 2349

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ala Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2350
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v183 IgV

<400> 2350

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Ala Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2351
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v184 IgV

<400> 2351

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2352
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v185 IgV

<400> 2352

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Gly Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2353
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v186 IgV

<400> 2353

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2354
<211> 111

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v187 IgV

<400> 2354

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Met Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2355
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v188 IgV

<400> 2355

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Met Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2356
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v189 IgV

<400> 2356

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Gln Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2357
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v190 IgV

<400> 2357

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gln Ser Ser Leu Glu Ser Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2358
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v191 IgV

<400> 2358

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Arg Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2359
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v192 IgV

<400> 2359

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2360
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v193 IgV

<400> 2360

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2361
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v194 IgV

<400> 2361

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Ala Val Asp Ser Arg Tyr Arg Asn
    50   55   60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2362
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v195 IgV

<400>  2362

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Glu Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2363
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v196 IgV

<400> 2363

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2364
<211> 111
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v197 IgV

<400> 2364

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Met Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2365
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v198 IgV

<400> 2365

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2366
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v199 IgV

<400> 2366

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Met Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2367
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v200 IgV

<400> 2367

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Val Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2368
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v201 IgV

<400> 2368

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Thr Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2369
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v202 IgV

<400> 2369

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Thr Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2370
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v203 IgV

<400> 2370

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Thr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2371
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v204 IgV

<400> 2371

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Val Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2372
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v205 IgV

<400>  2372

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2373
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v206 IgV

<400> 2373

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Lys Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2374
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v207 IgV

<400> 2374

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Leu Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2375
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v208 IgV

<400>  2375

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Asn Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2376
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v209 IgV

<400> 2376

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2377
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v210 IgV

<400> 2377

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2378
<211> 111

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v211 IgV

<400> 2378

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Thr Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2379
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v212 IgV

<400> 2379

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Arg Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2380
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v213 IgV

<400> 2380

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Arg Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2381
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v214 IgV

<400> 2381

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Arg Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2382
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v215 IgV

<400> 2382

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Arg Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2383
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v216 IgV

<400> 2383

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2384
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v217 IgV

<400> 2384

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Cys Ser Ser Leu Glu Glu Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2385
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v218 IgV

<400> 2385

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Gly Ser Ser Leu Glu Pro Val Asp Ser Arg Tyr Arg Asn
    50   55   60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Asp Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2386
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v219 IgV

<400>  2386

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gly Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2387
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v220 IgV

<400> 2387

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Gly Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2388
<211> 111
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v221 IgV

<400> 2388

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Leu Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2389
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v222 IgV

<400> 2389

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Pro Ser Ser Leu Glu Pro Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2390
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v223 IgV

<400>  2390

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Pro Ser Ser Leu Glu Ser Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2391
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v224 IgV

<400> 2391

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2392
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v225 IgV

<400> 2392

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu Lys Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2393
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v226 IgV

<400> 2393

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Val Ser Ser Leu Glu Thr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Leu Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2394
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v227 IgV

<400> 2394

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Gln Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2395
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v180 IgV

<400> 2395

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ala Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2396
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v181 IgV

<400>  2396

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ala Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2397
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v182 IgV

<400> 2397

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ala Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2398
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v183 IgV

<400> 2398

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Asp Ser Ser Leu Glu Ala Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2399
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v184 IgV

<400> 2399

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2400
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v185 IgV

<400> 2400

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gly Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2401
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v186 IgV

<400>  2401

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2402
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v187 IgV

<400>  2402

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Met Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2403
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v188 IgV

<400> 2403

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Met Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2404
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v189 IgV

<400>  2404

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2405
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v190 IgV

<400> 2405

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Gln Ser Ser Leu Glu Ser Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2406
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v191 IgV

<400> 2406

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Arg Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2407
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v192 IgV

<400> 2407

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2408
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v193 IgV

<400> 2408

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2409
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v194 IgV

<400>  2409

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Ala Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2410
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v195 IgV

<400>  2410

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

Ile Pro Gln Ser Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Glu Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2411
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v196 IgV

<400> 2411

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2412
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v197 IgV

<400>  2412

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Met Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2413
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v198 IgV

<400> 2413

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2414
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v199 IgV

<400> 2414

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Met Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2415
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v200 IgV

<400> 2415

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Val Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2416
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v201 IgV

<400> 2416

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2417
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v202 IgV

<400>  2417

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2418
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v203 IgV

<400>  2418

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

Ile Pro Gln Thr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2419
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v204 IgV

<400> 2419

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Val Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ala Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2420
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v205 IgV

<400>  2420

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2421
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v206 IgV

<400> 2421

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Lys Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2422
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v207 IgV

<400> 2422

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Leu Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2423
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v208 IgV

<400> 2423

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Asn Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2424
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v209 IgV

<400> 2424

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2425
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v210 IgV

<400>  2425

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2426
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v211 IgV

<400>  2426

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Arg Ser Ser Leu Glu Phe Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Thr Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2427
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v212 IgV

<400> 2427

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Arg Ser Ser Leu Glu His Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2428
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v213 IgV

<400>  2428

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2429
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v214 IgV

<400> 2429

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Arg Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2430
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v215 IgV

<400> 2430

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Arg Ser Ser Leu Glu Trp Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2431
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v216 IgV

<400> 2431

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Arg Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2432
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v217 IgV

<400> 2432

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Cys Ser Ser Leu Glu Glu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Ser Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2433
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v218 IgV

<400>  2433

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gly Ser Ser Leu Glu Pro Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Asp Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2434
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v219 IgV

<400>  2434

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Gly Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2435
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v220 IgV

<400> 2435

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Gly Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2436
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v221 IgV

<400>  2436

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Leu Ser Ser Leu Glu Val Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2437
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v222 IgV

<400> 2437

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Pro Ser Ser Leu Glu Pro Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2438
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v223 IgV

<400> 2438

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Pro Ser Ser Leu Glu Ser Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2439
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v224 IgV

<400> 2439

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Leu Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gly Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2440
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v225 IgV

<400> 2440

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Thr Ser Ser Leu Glu Lys Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2441
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v226 IgV

<400>  2441

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

```
Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Val Ser Ser Leu Glu Thr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Leu Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2442
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v227 IgV

<400>  2442

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Asn Ser Ser Leu Glu Gln Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2443
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v4 IgV

<400> 2443

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2444
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v4 IgV

<400>  2444

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110
```

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2445
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v21 IgV

<400> 2445

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2446
<211> 111
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v24 IgV

<400> 2446

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Lys Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2447
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v24 IgV

<400> 2447

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30
```

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Lys Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2448
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v30 IgV

<400> 2448

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2449
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v30 IgV

<400> 2449

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Gln Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2450
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v34 IgV

<400> 2450

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Asp Cys Phe
85 90 95

Val Phe Ser Arg Ser Leu Glu Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2451
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v96 IgV

<400> 2451

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Ala Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Gly Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
100 105 110

<210> 2452
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v45 IgV

<400> 2452

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Ser Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
100 105 110

<210> 2453
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v45 IgV

<400> 2453

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Ser Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2454
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v52 IgV

<400> 2454

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Thr Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2455
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v54 IgV

<400> 2455

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr His His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Ala Leu Ser Val Glu
100 105 110

<210> 2456
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v56 IgV

<400> 2456

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Val
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
            100   105   110

<210> 2457
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v56 IgV

<400> 2457

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Val
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val
115 120

<210> 2458
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v57 IgV

<400> 2458

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Arg Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu
            100   105   110

<210> 2459
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v57 IgV

<400> 2459

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Arg Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2460
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v59 IgV

<400>  2460

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
100 105 110

<210> 2461
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v59 IgV

<400> 2461

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Ala Ala Ala Asn Phe Ser Val
115 120

<210> 2462
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v61 IgV

<400> 2462

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Asn Val Glu
            100                 105                 110
```

<210> 2463
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v61 IgV

<400> 2463

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Asn Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2464
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v62 IgV

<400> 2464

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Arg Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Leu His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2465
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v62 IgV

<400> 2465

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Arg Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Leu His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2466
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v63 IgV

<400>  2466

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Thr Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2467
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v63 IgV

<400> 2467

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Thr Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2468
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v64 IgV

<400> 2468

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Glu Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
                85   90   95

Val Phe Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2469
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v64 IgV

<400> 2469

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Glu Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
85 90 95

Val Phe Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2470
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v65 IgV

<400> 2470

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2471
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v66 IgV

<400> 2471

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2472
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v66 IgV

<400>  2472

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe Glu Cys Ile
                85                  90                  95
```

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Ile Ser Val
115 120

<210> 2473
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v67 IgV

<400> 2473

Asp Thr Gln Glu Lys Glu Val Arg Ala Val Val Gly Ser Asp Val Glu
1 5 10 15

Leu Arg Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2474
<211> 122

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v67 IgV

<400> 2474

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Val Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Arg Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2475
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v68 IgV

<400> 2475

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Gly Arg Phe Asp Leu Asp Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2476
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v68 IgV

<400> 2476

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Gly Arg Phe Asp Leu Asp Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Ser Ser Val
115 120

<210> 2477
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v69 IgV

<400> 2477

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Pro Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2478
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v69 IgV

<400>  2478

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Pro Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95
```

Val Leu Ser Lys Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2479
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v70 IgV

<400> 2479

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Thr Ala Asn Phe Ser Val
115 120

<210> 2480
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v72 IgV

<400> 2480

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Gly Arg Cys Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
            100   105   110

<210> 2481
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v72 IgV

<400> 2481

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Gly Arg Cys Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2482
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v73 IgV

<400> 2482

Asp Thr Gln Glu Lys Glu Val Arg Ala Ile Val Gly Gly Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Gly Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Ala Glu
            100   105   110

<210> 2483
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v73 IgV

<400> 2483

Asp Thr Gln Glu Lys Glu Val Arg Ala Ile Val Gly Gly Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Gly Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Ala Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2484
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v74 IgV

<400>  2484

Asp Thr Gln Glu Lys Glu Val Arg Ala Ile Val Gly Gly Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Gly Phe Ser Leu
65                  70                  75                  80
```

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Ala Glu
100 105 110

<210> 2485
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v74 IgV

<400> 2485

Asp Thr Gln Glu Lys Glu Val Arg Ala Ile Val Gly Gly Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Gly Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Ala Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2486
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v75 IgV

<400> 2486

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Cys Phe Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu
            100                 105                 110
```

<210> 2487
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v75 IgV

<400> 2487

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Cys Phe Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asn Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Ser Ser Val
115 120

<210> 2488
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v76 IgV

<400> 2488

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100   105   110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2489
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v81 IgV

<400> 2489

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
            100   105   110

<210> 2490
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v81 IgV

<400> 2490

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2491
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v84 IgV

<400> 2491

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Arg Gly Phe Gln Glu Val Leu Ser Asp Glu
100 105 110

<210> 2492
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v84 IgV

<400> 2492

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Arg Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100   105   110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2493
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v92 IgV

<400> 2493

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu
            100                 105                 110
```

<210> 2494
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v92 IgV

<400> 2494

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2495
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v96 IgV

<400> 2495

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Ala Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Gln Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Gly Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Asp Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2496
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v98 IgV

<400> 2496

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Ile Leu Ser Asp Glu
100 105 110

<210> 2497
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v98 IgV

<400> 2497

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Ile Leu Ser Asp Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2498
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v103 IgV

<400> 2498

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2499
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v103 IgV

<400> 2499

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2500
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v126 IgV

<400> 2500

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2501
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v106 IgV

<400>  2501

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2502
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v127 IgV

<400>  2502

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
115 120

<210> 2503
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v108 IgV

<400> 2503

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

```
Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Gln Phe Ser Val
        115                 120


<210>  2504
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v129 IgV

<400>  2504

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Gln Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Gln Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110
```

Thr Leu His Val Ala Ala Gln Phe Ser Val
        115   120

<210> 2505
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v140 IgV

<400> 2505

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100   105   110

<210> 2506
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v140 IgV

<400> 2506

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2507
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v142 IgV

<400> 2507

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15
```

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2508
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v142 IgV

<400>  2508

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2509
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v177 IgV

<220>
<221> VARIANT
<222> (115)..(115)
<223> x is H or Q

<400> 2509

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45
```

```
Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu Xaa Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2510
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v148 IgV

<400> 2510

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

```
Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Arg Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110


<210>  2511
<211>  122
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v148 IgV

<400>  2511

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Arg Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110
```

Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115   120

<210> 2512
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v149 IgV

<400> 2512

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   25   30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35   40   45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50   55   60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65   70   75   80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85   90   95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100   105   110

Thr Leu His Val Ala Ala Asn Phe Ser Ala
        115   120

<210> 2513
<211> 122

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v158 IgV

<400> 2513

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu Arg Val Ala Ala Asn Phe Ser Val
        115                 120
```

<210> 2514
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v169 IgV

<400> 2514

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu Arg Val Ala Ala Asn Phe Ser Val
115 120

<210> 2515
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v160 IgV

<400> 2515

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
            100                 105                 110
```

<210> 2516
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v160 IgV

<400> 2516

```
Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Tyr Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60
```

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Pro Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val
        115                 120


<210>  2517
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v164 IgV

<400>  2517

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asp Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Glu Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80
```

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu
100 105 110

<210> 2518
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v168 IgV

<400> 2518

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Ser Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu Arg Val Ala Ala Asn Ser Ser Val
115 120

<210> 2519
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 ECD

<400> 2519

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gln
        115   120   125

<210> 2520
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 ECD

<400> 2520

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp Gln
        115                 120                 125
```

<210> 2521
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> IL16

<400> 2521

Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val Ser Val Glu Ser Thr
1   5   10   15

Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala Gly
            20   25   30

Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp Lys
        35   40   45

Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln Ser
    50   55   60

Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr Ala
65   70   75   80

Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala Leu
                85   90   95

Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln Ser
            100   105   110

Lys Glu Thr Thr Ala Ala Gly Asp Ser
        115   120

<210> 2522
<211> 246
<212> PRT
<213> Artificial Sequence

<220>
<223> OKT3

<400> 2522

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro Gly Ala
1   5   10   15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
            20   25   30

```
Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45

Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser Ser Thr Ala Tyr
65                  70                  75                  80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Thr Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly
        115                 120                 125

Ser Gly Gly Gly Ser Ser Gln Ile Val Leu Thr Gln Ser Pro Ala Ile
    130                 135                 140

Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
145                 150                 155                 160

Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser Gly Thr Ser
                165                 170                 175

Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro
            180                 185                 190

Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
        195                 200                 205

Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
    210                 215                 220
```

Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Asn
225 230 235 240

Arg Gly Gly Gly Asp Pro
245

<210> 2523
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Linker

<400> 2523

Gly Ser Gly Gly Ser
1 5

<210> 2524
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Linker

<400> 2524

Gly Gly Gly Gly Ser Ser Ala
1 5

<210> 2525
<211> 1182
<212> DNA
<213> Artificial Sequence

<220>
<223> CTLA-4 2519 - Fc

<400> 2525
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctaagg cgatgcacgt agcccagccc gctgttgttc tcgcaagttc tcgcggcata 120

gcctccttcg tatgtgagta tgccagtcca ggtaagtaca cggaggtacg ggtaactgta 180

ctgcggcagg ccgattccca ggttacggag gtttgtgcgg caacctacat gatgggtaac 240

gagcttacat ttctcgacga ctcaatatgt actgggacct cctcaggaaa tcaggtcaat 300

ctgaccatcc aaggtctgag ggcgatggat acgggtcttt atatttgcaa ggttgaactc 360

atgtatccgc ctccatacta tgaaggcatt ggaaatggaa cacaaatcta tgttattgac 420

ccggagccgt gtccagatag tgatcagggg ggaggtggat ccgagcccaa aagctccgac 480

aagactcaca catgcccccc ttgtccagcg cctgaagctg agggtgcgcc ctctgtcttc 540

cttttccccc ctaagccgaa agataccctg atgatctccc gcactcccga agtcacatgt 600

gttgttgtcg acgtatctca tgaagatcct gaggtgaaat tcaactggta tgtagacggg 660

gtcgaagttc ataatgctaa gactaagcca cgagaagagc aatacaactc aacgtatcgg 720

gtggtgagcg ttctgacggt tctgcaccaa gattggctta atggaaaaga gtataagtgc 780

aaggtgtcca acaaggctct tccggcaccc atcgaaaaga cgatttccaa agcgaaaggc 840

caacctaggg aaccgcaagt ttacactttg cccccgtgca gagaagaaat gaccaagaat 900

caagtttccc tgtggtgcct tgtgaagggc ttctacccta gcgatatagc agttgagtgg 960

gaatctaacg gccagcccga aaataattat aagactactc cgcccgtgct ggacagtgat 1020

ggttcatttt tcctgtattc aaaactcact gtggacaaat ctagatggca gcagggtaat 1080

gtgttctctt gttcagttat gcacgaggca ttgcacaatc actatacgca aaaaagtttg 1140

tctctctctc cgggggatta caaggatgac gacgataagt ag 1182

<210> 2526
<211> 371
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 2519 - Fc

<400> 2526

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                  10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gln Gly
        115                 120                 125

Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro
    130                 135                 140

Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe
145                 150                 155                 160

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
                165                 170                 175

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
            180                 185                 190
```

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
        195                 200                 205

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
    210                 215                 220

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
225                 230                 235                 240

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
                245                 250                 255

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg
            260                 265                 270

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly
        275                 280                 285

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
    290                 295                 300

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
305                 310                 315                 320

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
                325                 330                 335

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
            340                 345                 350

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Asp Tyr Lys Asp Asp
        355                 360                 365

Asp Asp Lys
    370
```

<210> 2527
<211> 1131
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - Fc

<400> 2527
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagag 420

cccaaaagct ccgacaagac tcacacatgc ccccccttgtc cagcgcctga agctgagggt 480

gcgccctctg tcttcctttt ccccccctaag ccgaaagata ccctgatgat ctcccgcact 540

cccgaagtca catgtgttgt tgtcgacgta tctcatgaag atcctgaggt gaaattcaac 600

tggtatgtag acggggtcga agttcataat gctaagacta agccacgaga agagcaatac 660

aactcaacgt atcgggtggt gagcgttctg acggttctgc accaagattg gcttaatgga 720

aaagagtata agtgcaaggt gtccaacaag gctcttccgg cacccatcga aaagacgatt 780

tccaaagcga aaggccaacc tagggaaccg caagtttgca ctttgccccc gtcaagagaa 840

gaaatgacca agaatcaagt ttccctgtct tgcgcagtga agggcttcta ccctagcgat 900

atagcagttg agtgggaatc taacggccag cccgaaaata attataagac tactccgccc 960

gtgctggaca gtgatggttc atttttcctg gtttcaaaac tcactgtgga caaatctaga 1020

tggcagcagg gtaatgtgtt ctcttgttca gttatgcacg aggcattgca caatcactat 1080

acgcaaaaaa gtttgtctct ctctccgggg caccatcatc accatcacta g 1131

<210> 2528
<211> 354
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - Fc

<400> 2528

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110


Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys
        115                 120                 125


Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu
    130                 135                 140
```

```
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
145                 150                 155                 160


Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
                165                 170                 175


Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
            180                 185                 190


Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
        195                 200                 205


Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
    210                 215                 220


Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
225                 230                 235                 240


Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Cys Thr Leu Pro Pro Ser
                245                 250                 255


Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys
            260                 265                 270


Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
        275                 280                 285


Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
    290                 295                 300


Ser Phe Phe Leu Val Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
305                 310                 315                 320


Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
                325                 330                 335
```

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly His His His His
340 345 350

His His

<210> 2529
<211> 860
<212> PRT
<213> Artificial Sequence

<220>
<223> Anti-CD3 scFv - PD-L1 303- PD-L1 303- PD-L1 303-Fc

<400> 2529

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

```
Ser Gly Gly Gly Ser Ser Gln Ile Val Leu Thr Gln Ser Pro Ala Ile
    130                 135                 140

Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
145                 150                 155                 160

Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser Gly Thr Ser
                165                 170                 175

Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro
            180                 185                 190

Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
        195                 200                 205

Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
    210                 215                 220

Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Asn
225                 230                 235                 240

Arg Gly Gly Gly Asp Pro Gly Gly Gly Gly Ser Ser Ala Phe Thr Val
                245                 250                 255

Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr
            260                 265                 270

Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu
        275                 280                 285

Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His
    290                 295                 300

Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala
305                 310                 315                 320
```

```
Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile
                325                 330                 335

Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser
            340                 345                 350

Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
        355                 360                 365

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro
    370                 375                 380

Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys
385                 390                 395                 400

Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr
                405                 410                 415

Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu
            420                 425                 430

Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu
        435                 440                 445

Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val
    450                 455                 460

Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly
465                 470                 475                 480

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Gly Gly Gly
                485                 490                 495

Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu
            500                 505                 510
```

```
Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro
        515                 520                 525

Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met
    530                 535                 540

Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys
545                 550                 555                 560

Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln
                565                 570                 575

Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln
            580                 585                 590

Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp
        595                 600                 605

Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Gly Gly Gly Gly Ser Gly
    610                 615                 620

Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro
625                 630                 635                 640

Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe
                645                 650                 655

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            660                 665                 670

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        675                 680                 685

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    690                 695                 700
```

```
Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
705                 710                 715                 720


Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                725                 730                 735


Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            740                 745                 750


Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        755                 760                 765


Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    770                 775                 780


Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
785                 790                 795                 800


Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                805                 810                 815


Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            820                 825                 830


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        835                 840                 845


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    850                 855                 860


<210>  2530
<211>  735
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> IL16 - PD-L1 303 - PD-L1 303 - PD-L1 303 - Fc

<400> 2530

```
Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val Ser Val Glu Ser Thr
1               5                   10                  15


Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala Gly
            20                  25                  30


Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp Lys
        35                  40                  45


Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln Ser
    50                  55                  60


Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr Ala
65                  70                  75                  80


Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala Leu
                85                  90                  95


Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln Ser
            100                 105                 110


Lys Glu Thr Thr Ala Ala Gly Asp Ser Gly Gly Gly Gly Ser Ser Ala
        115                 120                 125


Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
    130                 135                 140


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
145                 150                 155                 160


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
                165                 170                 175
```

```
Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
            180                 185                 190


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
        195                 200                 205


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
    210                 215                 220


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
225                 230                 235                 240


Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val
                245                 250                 255


Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr
            260                 265                 270


Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu
        275                 280                 285


Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His
    290                 295                 300


Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala
305                 310                 315                 320


Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile
                325                 330                 335


Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser
            340                 345                 350


Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
        355                 360                 365
```

```
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro
    370                 375                 380

Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys
385                 390                 395                 400

Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr
                405                 410                 415

Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu
            420                 425                 430

Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu
        435                 440                 445

Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val
    450                 455                 460

Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly
465                 470                 475                 480

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Gly Gly Gly
                485                 490                 495

Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His
            500                 505                 510

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val
        515                 520                 525

Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
    530                 535                 540

Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
545                 550                 555                 560
```

```
Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
                565                 570                 575

Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser
            580                 585                 590

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
        595                 600                 605

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile
    610                 615                 620

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
625                 630                 635                 640

Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
                645                 650                 655

Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
            660                 665                 670

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
        675                 680                 685

Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
    690                 695                 700

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
705                 710                 715                 720

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                725                 730                 735
```

<210> 2531
<211> 741
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 2519 - PD-L1 303 - PD-L1 303 - PD-L1 303 - Fc

<400> 2531

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gln Gly
        115   120   125

Gly Gly Gly Ser Ser Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr
    130   135   140

Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val
145   150   155   160

Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu
                165   170   175

```
Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala
            180                 185                 190

Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu
        195                 200                 205

Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp
    210                 215                 220

Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr
225                 230                 235                 240

Lys Arg Ile Thr Val Lys Val Asn Ala Gly Gly Gly Gly Ser Gly Gly
                245                 250                 255

Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu
            260                 265                 270

Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln
        275                 280                 285

Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp
    290                 295                 300

Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser
305                 310                 315                 320

Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly
                325                 330                 335

Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val
            340                 345                 350

Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile
        355                 360                 365
```

```
Thr Val Lys Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
    370                 375                 380

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
385                 390                 395                 400

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
                405                 410                 415

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
            420                 425                 430

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
        435                 440                 445

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
    450                 455                 460

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
465                 470                 475                 480

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
                485                 490                 495

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
            500                 505                 510

Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
        515                 520                 525

Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
    530                 535                 540

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
545                 550                 555                 560
```

```
Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
               565                 570                 575

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
            580                 585                 590

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
        595                 600                 605

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
    610                 615                 620

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
625                 630                 635                 640

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
               645                 650                 655

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
            660                 665                 670

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
        675                 680                 685

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
    690                 695                 700

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
705                 710                 715                 720

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
               725                 730                 735

Leu Ser Pro Gly Lys
            740
```

<210> 2532
<211> 786
<212> DNA
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L1 303 - Fc

<400> 2532
aaggcgatgc acgtagccca gcccgctgtt gttctcgcaa gttctcgcgg catagcctcc 60

ttcgtatgtg agtatgccag tccaggtaag tacacggagg tacgggtaac tgtactgcgg 120

caggccgatt cccaggttac ggaggtttgt gcggcaacct acatgatggg taacgagctt 180

acatttctcg acgactcaat atgtactggg acctcctcag gaaatcaggt caatctgacc 240

atccaaggtc tgagggcgat ggatacgggt ctttatattt gcaaggttga actcatgtat 300

ccgcctccat actatgaagg cattggaaat ggaacacaaa tctatgttat tgacccggag 360

ccgtctccag atagtgatca gggatccgga gggtctgggg gaggcggttc tgggggtgga 420

ggctcattta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 480

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 540

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 600

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 660

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 720

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggtggaggt 780

gggtca 786

<210> 2533
<211> 500
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L1 303 - Fc

<400> 2533

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp Gln Gly
        115                 120                 125

Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr
    130                 135                 140

Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met
145                 150                 155                 160

Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala
                165                 170                 175

Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val
            180                 185                 190
```

```
His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg
        195                 200                 205

Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln
    210                 215                 220

Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile
225                 230                 235                 240

Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn
                245                 250                 255

Ala Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
            260                 265                 270

Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
        275                 280                 285

Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
    290                 295                 300

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
305                 310                 315                 320

Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
                325                 330                 335

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
            340                 345                 350

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
        355                 360                 365

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
    370                 375                 380
```

```
Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
385                 390                 395                 400


Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
                405                 410                 415


Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
            420                 425                 430


Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
        435                 440                 445


Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
    450                 455                 460


Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
465                 470                 475                 480


Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
                485                 490                 495


Leu Ser Pro Gly
            500
```

<210> 2534
<211> 747
<212> DNA
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L2 1417 - Fc

<400> 2534
aaggcgatgc acgtagccca gcccgctgtt gttctcgcaa gttctcgcgg catagcctcc 60

ttcgtatgtg agtatgccag tccaggtaag tacacggagg tacgggtaac tgtactgcgg 120

caggccgatt cccaggttac ggaggtttgt gcggcaacct acatgatggg taacgagctt 180

acatttctcg acgactcaat atgtactggg acctcctcag gaaatcaggt caatctgacc 240

atccaaggtc tgagggcgat ggatacgggt ctttatattt gcaaggttga actcatgtat 300

ccgcctccat actatgaagg cattggaaat ggaacacaaa tctatgttat tgacccggag 360

ccgtctccag atagtgatca gggatccgga gggtctgggg gaggcggttc tgggggtgga 420

ggctcattat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 480

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 540

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 600

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 660

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 720

aaagttaaag ctggtggagg tgggtca 747

<210> 2535
<211> 487
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L2 1417 - Fc

<400> 2535

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

```
Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp Gln Gly
        115                 120                 125

Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe
    130                 135                 140

Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn
145                 150                 155                 160

Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly
                165                 170                 175

Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro His
            180                 185                 190

Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala
        195                 200                 205

Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr Arg
    210                 215                 220

Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu
225                 230                 235                 240

Lys Val Lys Ala Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser
                245                 250                 255
```

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
            260                 265                 270

Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
        275                 280                 285

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
    290                 295                 300

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
305                 310                 315                 320

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
                325                 330                 335

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
            340                 345                 350

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
        355                 360                 365

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
    370                 375                 380

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
385                 390                 395                 400

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
                405                 410                 415

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
            420                 425                 430

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
        435                 440                 445
```

```
Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
    450                 455                 460


Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
465                 470                 475                 480


Ser Leu Ser Leu Ser Pro Gly
                485


<210>  2536
<211>  786
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L1 303 - CTLA-4 2519 - Fc

<400>  2536

Thr Thr Thr Ala Cys Cys Gly Thr Ala Ala Cys Gly Gly Thr Cys Cys
1               5                   10                  15


Cys Thr Ala Ala Gly Gly Ala Thr Thr Thr Gly Thr Ala Cys Gly Thr
            20                  25                  30


Gly Gly Thr Thr Gly Ala Gly Thr Ala Cys Gly Gly Gly Ala Gly Cys
        35                  40                  45


Ala Ala Thr Ala Thr Gly Ala Cys Gly Ala Thr Thr Gly Ala Ala Thr
    50                  55                  60


Gly Cys Ala Ala Gly Thr Thr Cys Cys Cys Cys Gly Thr Ala Gly Ala
65                  70                  75                  80


Gly Ala Ala Gly Cys Ala Gly Cys Thr Cys Gly Ala Thr Thr Thr Gly
                85                  90                  95


Gly Cys Cys Gly Cys Thr Thr Thr Gly Ala Thr Ala Gly Thr Gly Thr
            100                 105                 110
```

```
Ala Cys Thr Gly Gly Gly Ala Ala Ala Thr Gly Gly Ala Ala Gly Gly
        115                 120                 125

Ala Ala Ala Ala Gly Ala Cys Ala Thr Cys Ala Thr Thr Cys Ala Ala
    130                 135                 140

Thr Thr Cys Gly Thr Cys Cys Ala Cys Gly Gly Thr Gly Ala Ala Gly
145                 150                 155                 160

Ala Gly Gly Ala Thr Cys Ala Ala Ala Ala Ala Gly Cys Gly Cys Ala
                165                 170                 175

Ala Cys Ala Thr Ala Gly Cys Thr Cys Cys Thr Ala Thr Ala Gly Ala
            180                 185                 190

Cys Ala Ala Cys Gly Cys Gly Cys Ala Cys Gly Cys Thr Thr Gly Cys
        195                 200                 205

Thr Thr Ala Ala Ala Gly Ala Cys Cys Ala Gly Cys Thr Gly Ala Gly
    210                 215                 220

Thr Cys Thr Thr Gly Gly Thr Ala Ala Cys Gly Cys Gly Gly Cys Gly
225                 230                 235                 240

Cys Thr Gly Cys Ala Gly Ala Thr Thr Ala Cys Cys Gly Ala Cys Gly
                245                 250                 255

Thr Ala Ala Ala Ala Cys Thr Thr Cys Ala Ala Gly Ala Cys Gly Cys
            260                 265                 270

Gly Gly Gly Ala Gly Thr Thr Thr Ala Thr Cys Gly Cys Thr Gly Cys
        275                 280                 285

Ala Thr Gly Ala Thr Thr Thr Cys Cys Thr Ala Cys Gly Gly Gly Gly
    290                 295                 300
```

```
Gly Thr Gly Gly Cys Gly Cys Ala Gly Ala Cys Thr Ala Thr Ala Ala
305                 310                 315                 320


Ala Ala Gly Gly Ala Thr Cys Ala Cys Thr Gly Thr Ala Ala Ala Gly
                325                 330                 335


Gly Thr Ala Ala Ala Cys Gly Cys Cys Gly Gly Ala Thr Cys Cys Gly
            340                 345                 350


Gly Ala Gly Gly Gly Thr Cys Thr Gly Gly Gly Gly Gly Ala Gly Gly
        355                 360                 365


Cys Gly Gly Thr Thr Cys Thr Gly Gly Gly Gly Gly Thr Gly Gly Ala
    370                 375                 380


Gly Gly Cys Thr Cys Ala Ala Ala Gly Gly Cys Gly Ala Thr Gly Cys
385                 390                 395                 400


Ala Cys Gly Thr Ala Gly Cys Cys Cys Ala Gly Cys Cys Cys Gly Cys
                405                 410                 415


Thr Gly Thr Thr Gly Thr Thr Cys Thr Cys Gly Cys Ala Ala Gly Thr
            420                 425                 430


Thr Cys Thr Cys Gly Cys Gly Gly Cys Ala Thr Ala Gly Cys Cys Thr
        435                 440                 445


Cys Cys Thr Thr Cys Gly Thr Ala Thr Gly Thr Gly Ala Gly Thr Ala
    450                 455                 460


Thr Gly Cys Cys Ala Gly Thr Cys Cys Ala Gly Gly Thr Ala Ala Gly
465                 470                 475                 480


Thr Ala Cys Ala Cys Gly Gly Ala Gly Gly Thr Ala Cys Gly Gly Gly
                485                 490                 495
```

```
Thr Ala Ala Cys Thr Gly Thr Ala Cys Thr Gly Cys Gly Gly Cys Ala
            500                 505                 510

Gly Gly Cys Cys Gly Ala Thr Thr Cys Cys Cys Ala Gly Gly Thr Thr
        515                 520                 525

Ala Cys Gly Gly Ala Gly Gly Thr Thr Thr Gly Thr Gly Cys Gly Gly
    530                 535                 540

Cys Ala Ala Cys Cys Thr Ala Cys Ala Thr Gly Ala Thr Gly Gly Gly
545                 550                 555                 560

Thr Ala Ala Cys Gly Ala Gly Cys Thr Thr Ala Cys Ala Thr Thr Thr
                565                 570                 575

Cys Thr Cys Gly Ala Cys Gly Ala Cys Thr Cys Ala Ala Thr Ala Thr
            580                 585                 590

Gly Thr Ala Cys Thr Gly Gly Gly Ala Cys Cys Thr Cys Cys Thr Cys
        595                 600                 605

Ala Gly Gly Ala Ala Ala Thr Cys Ala Gly Gly Thr Cys Ala Ala Thr
    610                 615                 620

Cys Thr Gly Ala Cys Cys Ala Thr Cys Cys Ala Ala Gly Gly Thr Cys
625                 630                 635                 640

Thr Gly Ala Gly Gly Gly Cys Gly Ala Thr Gly Gly Ala Thr Ala Cys
                645                 650                 655

Gly Gly Gly Thr Cys Thr Thr Thr Ala Thr Ala Thr Thr Thr Gly Cys
            660                 665                 670

Ala Ala Gly Gly Thr Thr Gly Ala Ala Cys Thr Cys Ala Thr Gly Thr
        675                 680                 685
```

```
Ala Thr Cys Cys Gly Cys Cys Thr Cys Cys Ala Thr Ala Cys Thr Ala
    690                 695                 700

Thr Gly Ala Ala Gly Gly Cys Ala Thr Thr Gly Gly Ala Ala Ala Thr
705                 710                 715                 720

Gly Gly Ala Ala Cys Ala Cys Ala Ala Ala Thr Cys Thr Ala Thr Gly
                725                 730                 735

Thr Thr Ala Thr Thr Gly Ala Cys Cys Cys Gly Gly Ala Gly Cys Cys
            740                 745                 750

Gly Thr Gly Thr Cys Cys Ala Gly Ala Thr Ala Gly Thr Gly Ala Thr
        755                 760                 765

Cys Ala Gly Gly Gly Thr Gly Gly Ala Gly Gly Thr Gly Gly Gly Thr
    770                 775                 780

Cys Ala
785
```

<210> 2537
<211> 500
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CTLA-4 2519 - Fc

<400> 2537

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser
    130                 135                 140

Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys
145                 150                 155                 160

Tyr Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val
                165                 170                 175

Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe
            180                 185                 190

Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn
        195                 200                 205

Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys
    210                 215                 220
```

```
Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn
225                 230                 235                 240


Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
                245                 250                 255


Gln Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
            260                 265                 270


Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
        275                 280                 285


Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
    290                 295                 300


Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
305                 310                 315                 320


Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
                325                 330                 335


Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
            340                 345                 350


Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
        355                 360                 365


Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
    370                 375                 380


Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
385                 390                 395                 400


Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
                405                 410                 415
```

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
            420   425   430

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
        435   440   445

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
    450   455   460

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
465   470   475   480

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
                485   490   495

Leu Ser Pro Gly
            500

<210> 2538
<211> 747
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CTLA-4 2519 - Fc

<400> 2538

Thr Thr Ala Thr Thr Cys Ala Cys Ala Gly Thr Gly Ala Cys Thr Gly
1   5   10   15

Thr Thr Cys Cys Gly Ala Ala Ala Gly Ala Gly Thr Thr Gly Thr Ala
            20   25   30

Thr Ala Thr Ala Ala Thr Cys Gly Ala Gly Cys Ala Ala Gly Gly Gly
        35   40   45

Ala Gly Thr Ala Ala Thr Gly Thr Thr Ala Cys Cys Cys Thr Gly Gly
    50   55   60

```
Ala Ala Thr Gly Cys Ala Ala Thr Thr Thr Thr Gly Ala Cys Ala Cys
65                  70                  75                  80


Cys Gly Gly Gly Thr Cys Ala Cys Ala Cys Gly Thr Cys Ala Ala Cys
                85                  90                  95


Cys Thr Cys Gly Gly Ala Gly Cys Gly Ala Thr Thr Ala Cys Thr Gly
            100                 105                 110


Cys Thr Thr Cys Thr Thr Thr Gly Cys Ala Ala Ala Ala Ala Gly Thr
        115                 120                 125


Thr Gly Ala Ala Ala Ala Cys Gly Ala Cys Gly Cys Gly Thr Cys Cys
    130                 135                 140


Cys Cys Cys Cys Ala Thr Ala Gly Gly Gly Ala Ala Ala Gly Gly Gly
145                 150                 155                 160


Cys Gly Ala Cys Cys Cys Thr Thr Cys Thr Gly Gly Ala Gly Gly Ala
                165                 170                 175


Gly Cys Ala Gly Thr Thr Gly Cys Cys Cys Cys Thr Thr Gly Gly Cys
            180                 185                 190


Ala Gly Gly Gly Cys Ala Cys Thr Cys Thr Thr Thr Cys Ala Cys Ala
        195                 200                 205


Thr Thr Cys Cys Cys Cys Ala Gly Gly Thr Gly Cys Ala Ala Gly Thr
    210                 215                 220


Cys Ala Gly Gly Gly Ala Cys Gly Ala Gly Gly Gly Gly Cys Ala Ala
225                 230                 235                 240


Thr Ala Cys Cys Gly Cys Thr Gly Cys Ala Thr Cys Ala Thr Ala Ala
                245                 250                 255
```

```
Thr Thr Thr Ala Cys Gly Gly Gly Gly Ala Cys Gly Cys Gly Thr Gly
            260                 265                 270

Gly Gly Ala Cys Thr Ala Cys Ala Ala Gly Thr Ala Cys Thr Thr Gly
        275                 280                 285

Ala Cys Thr Cys Thr Cys Ala Ala Ala Gly Thr Thr Ala Ala Ala Gly
    290                 295                 300

Cys Thr Gly Gly Ala Thr Cys Cys Gly Gly Ala Gly Gly Gly Thr Cys
305                 310                 315                 320

Thr Gly Gly Gly Gly Gly Ala Gly Gly Cys Gly Gly Thr Thr Cys Thr
                325                 330                 335

Gly Gly Gly Gly Gly Thr Gly Gly Ala Gly Gly Cys Thr Cys Ala Ala
            340                 345                 350

Ala Gly Gly Cys Gly Ala Thr Gly Cys Ala Cys Gly Thr Ala Gly Cys
        355                 360                 365

Cys Cys Ala Gly Cys Cys Cys Gly Cys Thr Gly Thr Thr Gly Thr Thr
    370                 375                 380

Cys Thr Cys Gly Cys Ala Ala Gly Thr Thr Cys Thr Cys Gly Cys Gly
385                 390                 395                 400

Gly Cys Ala Thr Ala Gly Cys Cys Thr Cys Cys Thr Thr Cys Gly Thr
                405                 410                 415

Ala Thr Gly Thr Gly Ala Gly Thr Ala Thr Gly Cys Cys Ala Gly Thr
            420                 425                 430

Cys Cys Ala Gly Gly Thr Ala Ala Gly Thr Ala Cys Ala Cys Gly Gly
        435                 440                 445
```

```
Ala Gly Gly Thr Ala Cys Gly Gly Gly Thr Ala Ala Cys Thr Gly Thr
    450                 455                 460

Ala Cys Thr Gly Cys Gly Gly Cys Ala Gly Gly Cys Cys Gly Ala Thr
465                 470                 475                 480

Thr Cys Cys Cys Ala Gly Gly Thr Thr Ala Cys Gly Gly Ala Gly Gly
                485                 490                 495

Thr Thr Thr Gly Thr Gly Cys Gly Gly Cys Ala Ala Cys Cys Thr Ala
            500                 505                 510

Cys Ala Thr Gly Ala Thr Gly Gly Gly Thr Ala Ala Cys Gly Ala Gly
        515                 520                 525

Cys Thr Thr Ala Cys Ala Thr Thr Thr Cys Thr Cys Gly Ala Cys Gly
    530                 535                 540

Ala Cys Thr Cys Ala Ala Thr Ala Thr Gly Thr Ala Cys Thr Gly Gly
545                 550                 555                 560

Gly Ala Cys Cys Thr Cys Cys Thr Cys Ala Gly Gly Ala Ala Ala Thr
                565                 570                 575

Cys Ala Gly Gly Thr Cys Ala Ala Thr Cys Thr Gly Ala Cys Cys Ala
            580                 585                 590

Thr Cys Cys Ala Ala Gly Gly Thr Cys Thr Gly Ala Gly Gly Gly Cys
        595                 600                 605

Gly Ala Thr Gly Gly Ala Thr Ala Cys Gly Gly Gly Thr Cys Thr Thr
    610                 615                 620

Thr Ala Thr Ala Thr Thr Thr Gly Cys Ala Ala Gly Gly Thr Thr Gly
625                 630                 635                 640
```

```
Ala Ala Cys Thr Cys Ala Thr Gly Thr Ala Thr Cys Cys Gly Cys Cys
                645                 650                 655


Thr Cys Cys Ala Thr Ala Cys Thr Ala Thr Gly Ala Ala Gly Gly Cys
            660                 665                 670


Ala Thr Thr Gly Gly Ala Ala Ala Thr Gly Gly Ala Ala Cys Ala Cys
        675                 680                 685


Ala Ala Ala Thr Cys Thr Ala Thr Gly Thr Thr Ala Thr Thr Gly Ala
    690                 695                 700


Cys Cys Cys Gly Gly Ala Gly Cys Cys Gly Thr Gly Thr Cys Cys Ala
705                 710                 715                 720


Gly Ala Thr Ala Gly Thr Gly Ala Thr Cys Ala Gly Gly Gly Thr Gly
                725                 730                 735


Gly Ala Gly Gly Thr Gly Gly Gly Thr Cys Ala
            740                 745


<210>  2539
<211>  487
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  PD-L2 1417 - CTLA-4 2519 - Fc

<400>  2539

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30
```

```
Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val
        115                 120                 125

Leu Ala Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser
    130                 135                 140

Pro Gly Lys Tyr Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp
145                 150                 155                 160

Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu
                165                 170                 175

Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn
            180                 185                 190

Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu
        195                 200                 205

Tyr Ile Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly
    210                 215                 220
```

```
Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro
225                 230                 235                 240


Asp Ser Asp Gln Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser
                245                 250                 255


Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
            260                 265                 270


Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
        275                 280                 285


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
    290                 295                 300


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
305                 310                 315                 320


Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
                325                 330                 335


Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
            340                 345                 350


Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
        355                 360                 365


Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
    370                 375                 380


Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
385                 390                 395                 400


Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
                405                 410                 415
```

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
420 425 430

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
435 440 445

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
450 455 460

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
465 470 475 480

Ser Leu Ser Leu Ser Pro Gly
485

<210> 2540
<211> 1494
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - Fc - CTLA-4 2520

<400> 2540
tttaccgtaa cggtccctaa ggatttgtac gtggttgagt acgggagcaa tatgacgatt 60

gaatgcaagt tccccgtaga gaagcagctc gatttggccg ctttgatagt gtactgggaa 120

atggaaggaa aagacatcat tcaattcgtc cacggtgaag aggatcaaaa agcgcaacat 180

agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 240

ctgcagatta ccgacgtaaa acttcaagac gcgggagttt atcgctgcat gatttcctac 300

gggggtggcg cagactataa aaggatcact gtaaaggtaa acgccggatc cggagggtct 360

gggggaggcg gttctgagcc caaaagctcc gacaagactc acacatgccc cccttgtcca 420

gcgcctgaag ctgagggtgc gccctctgtc ttccttttcc cccctaagcc gaaagatacc 480

ctgatgatct cccgcactcc cgaagtcaca tgtgttgttg tcgacgtatc tcatgaagat 540

cctgaggtga aattcaactg gtatgtagac ggggtcgaag ttcataatgc taagactaag 600

ccacgagaag agcaatacaa ctcaacgtat cgggtggtga gcgttctgac ggttctgcac 660

caagattggc ttaatggaaa agagtataag tgcaaggtgt ccaacaaggc tcttccggca 720

cccatcgaaa agacgatttc caaagcgaaa ggccaaccta gggaaccgca agtttacact 780

ttgcccccgt caagagacga acttaccaag aatcaagttt ccctgacgtg ccttgtgaag 840

ggcttctacc ctagcgatat agcagttgag tgggaatcta acggccagcc cgaaaataat 900

tataagacta ctccgcccgt gctggacagt gatggttcat ttttcctgta ttcaaaactc 960

actgtggaca aatctagatg gcagcagggt aatgtgttct cttgttcagt tatgcacgag 1020

gcattgcaca atcactatac gcaaaaaagt ttgtctctct ctccgggggg tggaggtggc 1080

tctggaggtg gtggaagcgg tggcggtggt agcaaggcga tgcacgtagc ccagcccgct 1140

gttgttctcg caagttctcg cggcatagcc tccttcgtat gtgagtatgc cagtccaggt 1200

aagtacacgg aggtacgggt aactgtactg cggcaggccg attcccaggt tacggaggtt 1260

tgtgcggcaa cctacatgat gggtaacgag cttacatttc tcgacgactc aatatgtact 1320

gggacctcct caggaaatca ggtcaatctg accatccaag gtctgagggc gatggatacg 1380

ggtctttata tttgcaaggt tgaactcatg tatccgcctc catactatga aggcattgga 1440

aatggaacac aaatctatgt tattgacccg gagccgagcc cagatagtga tcag 1494

<210> 2541
<211> 500
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - Fc - CTLA-4 2520

<400> 2541

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
        115                 120                 125

Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
    130                 135                 140

Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
145                 150                 155                 160

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
                165                 170                 175

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
            180                 185                 190

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
        195                 200                 205

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
    210                 215                 220
```

```
Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
225                 230                 235                 240

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
                245                 250                 255

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys
            260                 265                 270

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
        275                 280                 285

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
    290                 295                 300

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
305                 310                 315                 320

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
                325                 330                 335

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
            340                 345                 350

Leu Ser Leu Ser Pro Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
        355                 360                 365

Gly Gly Gly Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val
    370                 375                 380

Leu Ala Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser
385                 390                 395                 400

Pro Gly Lys Tyr Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp
                405                 410                 415
```

Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu
420 425 430

Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn
435 440 445

Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu
450 455 460

Tyr Ile Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly
465 470 475 480

Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro
485 490 495

Asp Ser Asp Gln
500

<210> 2542
<211> 1455
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - Fc - CTLA-4 2520

<400> 2542
ttattcacag tgactgttcc gaaagagttg tatataatcg agcaagggag taatgttacc 60

ctggaatgca attttgacac cgggtcacac gtcaacctcg gagcgattac tgcttctttg 120

caaaaagttg aaaacgacgc gtccccccat agggaaaggg cgacccttct ggaggagcag 180

ttgccccttg gcagggcact ctttcacatt ccccaggtgc aagtcaggga cgaggggcaa 240

taccgctgca tcataattta cggggacgcg tgggactaca agtacttgac tctcaaagtt 300

aaagctggat ccggagggtc tgggggaggc ggttctgagc ccaaaagctc cgacaagact 360

cacacatgcc ccccttgtcc agcgcctgaa gctgagggtg cgccctctgt cttccttttc 420

cccctaagc cgaaagatac cctgatgatc tcccgcactc ccgaagtcac atgtgttgtt 480

gtcgacgtat ctcatgaaga tcctgaggtg aaattcaact ggtatgtaga cggggtcgaa 540

gttcataatg ctaagactaa gccacgagaa gagcaataca actcaacgta tcgggtggtg 600

agcgttctga cggttctgca ccaagattgg cttaatggaa aagagtataa gtgcaaggtg 660

tccaacaagg ctcttccggc acccatcgaa aagacgattt ccaaagcgaa aggccaacct 720

agggaaccgc aagtttacac tttgcccccg tcaagagacg aacttaccaa gaatcaagtt 780

tccctgacgt gccttgtgaa gggcttctac cctagcgata tagcagttga gtgggaatct 840

aacggccagc ccgaaaataa ttataagact actccgcccg tgctggacag tgatggttca 900

tttttcctgt attcaaaact cactgtggac aaatctagat ggcagcaggg taatgtgttc 960

tcttgttcag ttatgcacga ggcattgcac aatcactata cgcaaaaaag tttgtctctc 1020

tctccggggg gtggaggtgg ctctggaggt ggtggaagcg gtggcggtgg tagcaaggcg 1080

atgcacgtag cccagcccgc tgttgttctc gcaagttctc gcggcatagc ctccttcgta 1140

tgtgagtatg ccagtccagg taagtacacg gaggtacggg taactgtact gcggcaggcc 1200

gattcccagg ttacggaggt ttgtgcggca acctacatga tgggtaacga gcttacattt 1260

ctcgacgact caatatgtac tgggacctcc tcaggaaatc aggtcaatct gaccatccaa 1320

ggtctgaggg cgatggatac gggtctttat atttgcaagg ttgaactcat gtatccgcct 1380

ccatactatg aaggcattgg aaatggaaca caaatctatg ttattgaccc ggagccgagc 1440

ccagatagtg atcag 1455

<210> 2543
<211> 487
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - Fc - CTLA-4 2520

<400> 2543

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
            100                 105                 110

Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys
        115                 120                 125

Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro
    130                 135                 140

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
145                 150                 155                 160

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
                165                 170                 175

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
            180                 185                 190
```

```
Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
        195                 200                 205

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
    210                 215                 220

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
225                 230                 235                 240

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
                245                 250                 255

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
            260                 265                 270

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
        275                 280                 285

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
    290                 295                 300

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
305                 310                 315                 320

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
                325                 330                 335

Gln Lys Ser Leu Ser Leu Ser Pro Gly Gly Gly Gly Gly Ser Gly Gly
            340                 345                 350

Gly Gly Ser Gly Gly Gly Gly Ser Lys Ala Met His Val Ala Gln Pro
        355                 360                 365

Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu
    370                 375                 380
```

```
Tyr Ala Ser Pro Gly Lys Tyr Thr Glu Val Arg Val Thr Val Leu Arg
385                 390                 395                 400


Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met
                405                 410                 415


Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser
            420                 425                 430


Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp
        435                 440                 445


Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr
    450                 455                 460


Tyr Glu Gly Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu
465                 470                 475                 480


Pro Ser Pro Asp Ser Asp Gln
                485


<210>  2544
<211>  231
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  K Chain

<400>  2544

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15


Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45
```

```
Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Lys Lys Met Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Lys Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220

Ser Leu Ser Leu Ser Pro Gly
225                 230
```

<210> 2545
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> D chain

<400> 2545

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15


Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60


Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80


Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95


Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110


Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125


Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140
```

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Asp Gly Phe Tyr Pro Ser
145 150 155 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
165 170 175

Asp Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
180 185 190

Ser Asp Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
195 200 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
210 215 220

Ser Leu Ser Leu Ser Pro Gly
225 230

<210> 2546
<211> 1107
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - Fc

<400> 2546
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctgggggagg tggatccgag cccaaaagct ccgacaagac tcacacatgc 420

ccccccttgtc cagcgcctga agctgagggt gcgccctctg tcttcctttt ccccccctaag 480

ccgaaagata ccctgatgat ctcccgcact cccgaagtca catgtgttgt tgtcgacgta 540

tctcatgaag atcctgaggt gaaattcaac tggtatgtag acggggtcga agttcataat 600

gctaagacta agccacgaga agagcaatac aactcaacgt atcgggtggt gagcgttctg 660

acggttctgc accaagattg gcttaatgga aaagagtata agtgcaaggt gtccaacaag 720

gctcttccgg cacccatcga aaagacgatt tccaaagcga aaggccaacc tagggaaccg 780

caagtttaca ctttgccccc gtcaagaaag aaaatgacca agaatcaagt ttccctgacg 840

tgccttgtga agggcttcta ccctagcgat atagcagttg agtgggaatc taacggccag 900

cccgaaaata attataagac tactccgccc gtgctgaaaa gtgatggttc atttttcctg 960

tattcaaaac tcactgtgga caaatctaga tggcagcagg gtaatgtgtt ctcttgttca 1020

gttatgcacg aggcattgca caatcactat acgcaaaaaa gtttgtctct ctctccgggg 1080

gattacaagg atgacgacga taagtag 1107

<210> 2547
<211> 346
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - Fc

<400> 2547

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

```
Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser
            100                 105                 110

Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly
        115                 120                 125

Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
    130                 135                 140

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
145                 150                 155                 160

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
                165                 170                 175

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
            180                 185                 190

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
        195                 200                 205

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
    210                 215                 220

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
225                 230                 235                 240

Tyr Thr Leu Pro Pro Ser Arg Lys Lys Met Thr Lys Asn Gln Val Ser
                245                 250                 255
```

```
Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
            260                 265                 270


Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
        275                 280                 285


Val Leu Lys Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
    290                 295                 300


Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
305                 310                 315                 320


His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
                325                 330                 335


Pro Gly Asp Tyr Lys Asp Asp Asp Asp Lys
            340                 345


<210>  2548
<211>  1161
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  ICOSL 2244 - Fc

<400>  2548
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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc      120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc      180

agtgagtcga aaaccgtggt gacctaccac atcccacaga acagctcctt ggaaaacgtg      240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc      300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg      360

agccaatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca      420
```

aacttcagcg tgggggggagg tggatccgag cccaaaagct ccgacaagac tcacacatgc 480

cccccttgtc cagcgcctga agctgagggt gcgccctctg tcttccttttt ccccccctaag 540

ccgaaagata ccctgatgat ctcccgcact cccgaagtca catgtgttgt tgtcgacgta 600

tctcatgaag atcctgaggt gaaattcaac tggtatgtag acggggtcga agttcataat 660

gctaagacta agccacgaga agagcaatac aactcaacgt atcgggtggt gagcgttctg 720

acggttctgc accaagattg gcttaatgga aaagagtata agtgcaaggt gtccaacaag 780

gctcttccgg cacccatcga aaagacgatt tccaaagcga aaggccaacc tagggaaccg 840

caagtttaca ctttgccccc gtcaagagag gaaatgacca agaatcaagt ttccctgacg 900

tgccttgtgg acggcttcta ccctagcgat atagcagttg agtgggaatc taacggccag 960

cccgaaaata attatgacac tactccgccc gtgctggaca gtgatggttc atttttcctg 1020

tattcagacc tcactgtgga caaatctaga tggcagcagg gtaatgtgtt ctcttgttca 1080

gttatgcacg aggcattgca caatcactat acgcaaaaaa gtttgtctct ctctccgggg 1140

caccatcatc accatcacta g 1161

<210> 2549
<211> 364
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2244 - Fc

<400> 2549

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

```
Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly Ser Glu
        115                 120                 125

Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
    130                 135                 140

Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
145                 150                 155                 160

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
                165                 170                 175

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
            180                 185                 190

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
        195                 200                 205

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
    210                 215                 220

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
225                 230                 235                 240
```

```
Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
                245                 250                 255

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
            260                 265                 270

Asn Gln Val Ser Leu Thr Cys Leu Val Asp Gly Phe Tyr Pro Ser Asp
        275                 280                 285

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Asp
    290                 295                 300

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
305                 310                 315                 320

Asp Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
                325                 330                 335

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
            340                 345                 350

Leu Ser Leu Ser Pro Gly His His His His His His
        355                 360
```

<210> 2550
<211> 1161
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2264 - Fc

<400> 2550

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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc      120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc      180
```

agtgagtcga aaaccgtggt gacctaccac atcccacagc acagctcctt ggaatatgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agcagatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggggggagg tggatccgag cccaaaagct ccgacaagac tcacacatgc 480

ccccccttgtc cagcgcctga agctgagggt gcgccctctg tcttcctttt ccccccctaag 540

ccgaaagata ccctgatgat ctcccgcact cccgaagtca catgtgttgt tgtcgacgta 600

tctcatgaag atcctgaggt gaaattcaac tggtatgtag acggggtcga agttcataat 660

gctaagacta agccacgaga agagcaatac aactcaacgt atcgggtggt gagcgttctg 720

acggttctgc accaagattg gcttaatgga aaagagtata agtgcaaggt gtccaacaag 780

gctcttccgg cacccatcga aaagacgatt tccaaagcga aaggccaacc tagggaaccg 840

caagtttaca ctttgccccc gtcaagagag gaaatgacca agaatcaagt ttccctgacg 900

tgccttgtgg acggcttcta ccctagcgat atagcagttg agtgggaatc taacggccag 960

cccgaaaata attatgacac tactccgccc gtgctggaca gtgatggttc atttttcctg 1020

tattcagacc tcactgtgga caaatctaga tggcagcagg gtaatgtgtt ctcttgttca 1080

gttatgcacg aggcattgca caatcactat acgcaaaaaa gtttgtctct ctctccgggg 1140

caccatcatc accatcacta g 1161

<210> 2551
<211> 364
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2264 - Fc

<400> 2551

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly Ser Glu
        115                 120                 125

Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
    130                 135                 140

Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
145                 150                 155                 160

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
                165                 170                 175

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
            180                 185                 190

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
        195                 200                 205
```

```
Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
    210                 215                 220

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
225                 230                 235                 240

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
                245                 250                 255

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
            260                 265                 270

Asn Gln Val Ser Leu Thr Cys Leu Val Asp Gly Phe Tyr Pro Ser Asp
        275                 280                 285

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Asp
    290                 295                 300

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
305                 310                 315                 320

Asp Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
                325                 330                 335

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
            340                 345                 350

Leu Ser Leu Ser Pro Gly His His His His His His
        355                 360
```

<210> 2552
<211> 1146
<212> DNA
<213> Artificial Sequence

<220>

<223> PD-L1 303 - Fc

<400> 2552
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agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cgggggaggt 420

ggatccgagc ccaaaagctc cgacaagact cacacatgcc ccccttgtcc agcgcctgaa 480

gctgagggtg cgccctctgt cttccttttc ccccctaagc cgaaagatac cctgatgatc 540

tcccgcactc ccgaagtcac atgtgttgtt gtcgacgtat ctcatgaaga tcctgaggtg 600

aaattcaact ggtatgtaga cggggtcgaa gttcataatg ctaagactaa gccacgagaa 660

gagcaataca actcaacgta tcgggtggtg agcgttctga cggttctgca ccaagattgg 720

cttaatggaa aagagtataa gtgcaaggtg tccaacaagg ctcttccggc acccatcgaa 780

aagacgattt ccaaagcgaa aggccaacct agggaaccgc aagtttacac tttgcccccg 840

tcaagaaaga aaatgaccaa gaatcaagtt tccctgacgt gccttgtgaa gggcttctac 900

cctagcgata tagcagttga gtgggaatct aacggccagc ccgaaaataa ttataagact 960

actccgcccg tgctgaaaag tgatggttca tttttcctgt attcaaaact cactgtggac 1020

aaatctagat ggcagcaggg taatgtgttc tcttgttcag ttatgcacga ggcattgcac 1080

aatcactata cgcaaaaaag tttgtctctc tctccggggg attacaagga tgacgacgat 1140

aagtga 1146

<210> 2553
<211> 359
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - Fc

<400> 2553

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr
        115                 120                 125


His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser
    130                 135                 140


Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
145                 150                 155                 160


Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
                165                 170                 175
```

```
Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
            180                 185                 190

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
        195                 200                 205

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
    210                 215                 220

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
225                 230                 235                 240

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
                245                 250                 255

Pro Pro Ser Arg Lys Lys Met Thr Lys Asn Gln Val Ser Leu Thr Cys
            260                 265                 270

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
        275                 280                 285

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Lys
    290                 295                 300

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
305                 310                 315                 320

Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
                325                 330                 335

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Asp
            340                 345                 350

Tyr Lys Asp Asp Asp Asp Lys
        355
```

<210> 2554
<211> 1119
<212> DNA
<213> Artificial Sequence

<220>
<223> CD80 2615 - Fc

<400> 2554
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac 120

aatgtttctg ttgaagagct ggcacaaact cgcatctact ggcaaaagga gaagaaaatg 180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacaagaa ccggaccatc 240

tttgacatca ctaataacct ctccattgtg atcctggctc tgcgcccatc tgacgagggc 300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct 360

gaagtgacgt tatcagtcaa agctgacttc gggggaggtg gatccgagcc caaaagctcc 420

gacaagactc acacatgccc cccttgtcca gcgcctgaag ctgagggtgc gccctctgtc 480

ttccttttcc cccctaagcc gaaagatacc ctgatgatct cccgcactcc cgaagtcaca 540

tgtgttgttg tcgacgtatc tcatgaagat cctgaggtga aattcaactg gtatgtagac 600

ggggtcgaag ttcataatgc taagactaag ccacgagaag agcaatacaa ctcaacgtat 660

cgggtggtga gcgttctgac ggttctgcac caagattggc ttaatggaaa agagtataag 720

tgcaaggtgt ccaacaaggc tcttccggca cccatcgaaa agacgatttc caaagcgaaa 780

ggccaaccta gggaaccgca agtttacact ttgcccccgt caagagagga aatgaccaag 840

aatcaagttt ccctgacgtg ccttgtggac ggcttctacc ctagcgatat agcagttgag 900

tgggaatcta acggccagcc cgaaaataat tatgacacta ctccgcccgt gctggacagt 960

gatggttcat ttttcctgta ttcagacctc actgtggaca aatctagatg gcagcagggt 1020

aatgtgttct cttgttcagt tatgcacgag gcattgcaca atcactatac gcaaaaaagt 1080

ttgtctctct ctccggggca ccatcatcac catcactag 1119

<210> 2555
<211> 350
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 2615 - Fc

<400> 2555

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Gly Gly Gly Gly
            100                 105                 110


Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro
        115                 120                 125


Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys
    130                 135                 140
```

```
Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
145                 150                 155                 160


Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
                165                 170                 175


Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
            180                 185                 190


Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
        195                 200                 205


Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
    210                 215                 220


Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
225                 230                 235                 240


Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
                245                 250                 255


Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Asp Gly Phe Tyr Pro
            260                 265                 270


Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
        275                 280                 285


Tyr Asp Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
    290                 295                 300


Tyr Ser Asp Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
305                 310                 315                 320


Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
                325                 330                 335
```

Lys Ser Leu Ser Leu Ser Pro Gly His His His His His His
340 345 350

<210> 2556
<211> 1095
<212> DNA
<213> Artificial Sequence

<220>
<223> CD80 1152 - Fc

<400> 2556
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agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac 120

aatgtttctc tggaagagct ggcacaaact cgcatctact ggcaaaaggg taagaaaatg 180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacaagaa ccggaccatc 240

tttgacatca ctaataacct ctccattgtg atcctggacc cacgcccatc tgacgagggc 300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct 360

gaagtggggg gaggtggatc cgagcccaaa agctccgaca agactcacac atgccccct 420

tgtccagcgc ctgaagctga gggtgcgccc tctgtcttcc ttttcccccc taagccgaaa 480

gataccctga tgatctcccg cactcccgaa gtcacatgtg ttgttgtcga cgtatctcat 540

gaagatcctg aggtgaaatt caactggtat gtagacgggg tcgaagttca taatgctaag 600

actaagccac gagaagagca atacaactca acgtatcggg tggtgagcgt tctgacggtt 660

ctgcaccaag attggcttaa tggaaaagag tataagtgca aggtgtccaa caaggctctt 720

ccggcaccca tcgaaaagac gatttccaaa gcgaaaggcc aacctaggga accgcaagtt 780

tacactttgc ccccgtcaag agaggaaatg accaagaatc aagtttccct gacgtgcctt 840

gtggacggct tctaccctag cgatatagca gttgagtggg aatctaacgg ccagcccgaa 900

aataattatg acactactcc gcccgtgctg gacagtgatg gttcattttt cctgtattca 960

gacctcactg tggacaaatc tagatggcag cagggtaatg tgttctcttg ttcagttatg 1020

cacgaggcat tgcacaatca ctatacgcaa aaaagtttgt ctctctctcc ggggcaccat 1080

catcaccatc actag 1095

<210> 2557
<211> 342
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 1152 - Fc

<400> 2557

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys
100 105 110

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro
115 120 125

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
130 135 140

```
Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
145                 150                 155                 160

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
                165                 170                 175

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
            180                 185                 190

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
        195                 200                 205

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
    210                 215                 220

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
225                 230                 235                 240

Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr
                245                 250                 255

Cys Leu Val Asp Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
            260                 265                 270

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Asp Thr Thr Pro Pro Val Leu
        275                 280                 285

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Asp Leu Thr Val Asp Lys
    290                 295                 300

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
305                 310                 315                 320

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
                325                 330                 335
```

His His His His His His
            340

<210> 2558
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> Knob Fc

<400> 2558

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1   5   10   15

Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20   25   30

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35   40   45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50   55   60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65   70   75   80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85   90   95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100   105   110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115   120   125

```
Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg Glu Glu Met Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220

Ser Leu Ser Leu Ser Pro Gly
225                 230
```

<210> 2559
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> Hole Fc

<400> 2559

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15

Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45
```

```
Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Cys Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220

Ser Leu Ser Leu Ser Pro Gly
225                 230
```

<210> 2560
<211> 1170
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - Fc

<400> 2560
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agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagagc ccaaaagctc cgacaagact 480

cacacatgcc ccccttgtcc agcgcctgaa gctgagggtg cgccctctgt cttccttttc 540

ccccctaagc cgaaagatac cctgatgatc tcccgcactc ccgaagtcac atgtgttgtt 600

gtcgacgtat ctcatgaaga tcctgaggtg aaattcaact ggtatgtaga cggggtcgaa 660

gttcataatg ctaagactaa gccacgagaa gagcaataca actcaacgta tcgggtggtg 720

agcgttctga cggttctgca ccaagattgg cttaatggaa aagagtataa gtgcaaggtg 780

tccaacaagg ctcttccggc acccatcgaa aagacgattt ccaaagcgaa aggccaacct 840

agggaaccgc aagtttgcac tttgcccccg tcaagagaag aaatgaccaa gaatcaagtt 900

tccctgtctt gcgcagtgaa gggcttctac cctagcgata tagcagttga gtgggaatct 960

aacggccagc ccgaaaataa ttataagact actccgcccg tgctggacag tgatggttca 1020

tttttcctgg tttcaaaact cactgtggac aaatctagat ggcagcaggg taatgtgttc 1080

tcttgttcag ttatgcacga ggcattgcac aatcactata cgcaaaaaag tttgtctctc 1140

tctccggggc accatcatca ccatcactag 1170

<210> 2561
<211> 367
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - Fc

<400> 2561

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys
130 135 140

```
Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro
145                 150                 155                 160


Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
                165                 170                 175


Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
            180                 185                 190


Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
        195                 200                 205


Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
    210                 215                 220


His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
225                 230                 235                 240


Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
                245                 250                 255


Gln Pro Arg Glu Pro Gln Val Cys Thr Leu Pro Pro Ser Arg Glu Glu
            260                 265                 270


Met Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr
        275                 280                 285


Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
    290                 295                 300


Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
305                 310                 315                 320


Leu Val Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
                325                 330                 335
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Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
340 345 350

Gln Lys Ser Leu Ser Leu Ser Pro Gly His His His His His His
355 360 365

<210> 2562
<211> 1239
<212> DNA
<213> Artificial Sequence

<220>
<223> OKT3 - PD-L1 303

<400> 2562
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agcgctcagg tccagctgca gcagtctggg gctgaactgg caagacctgg ggcctcagtg 120

aagatgtcct gcaaggcttc tggctacacc tttactaggt acacgatgca ctgggtaaaa 180

cagaggcctg gacagggtct ggaatggatt ggatacatta atcctagccg tggttatact 240

aattacaatc agaagttcaa ggacaaggcc acattgacta cagacaaatc ctccagcaca 300

gcctacatgc aactgagcag cctgacatct gaggactctg cagtctatta ctgtgcaaga 360

tattatgatg atcattactg ccttgactac tggggccaag gcaccacggt gaccgtgagc 420

gccgggggag gtggcagcgg gggaggtggc agcggcggcg ggagctccca aattgttctc 480

acccagtctc cagcaatcat gtctgcatct ccaggggaga aggtcaccat gacctgcagt 540

gccagctcaa gtgtaagtta catgaactgg taccagcaga agtcaggcac ctcccccaaa 600

agatggattt atgacacatc caaactggct tctggagtcc ctgctcactt caggggcagt 660

gggtctggga cctcttactc tctcacaatc agcggcatgg aggctgaaga tgctgccact 720

tattactgcc agcagtggag tagtaaccca ttcacgttcg gctcggggac aaagttggaa 780

ataaaccggg gcggtggcga tcccggatcc ggagggtctg ggggaggcgg ttctgggggt 840

ggaggctcat ttaccgtaac ggtccctaag gatttgtacg tggttgagta cgggagcaat 900

atgacgattg aatgcaagtt ccccgtagag aagcagctcg atttggccgc tttgatagtg 960

tactgggaaa tggaaggaaa agacatcatt caattcgtcc acggtgaaga ggatcaaaaa 1020

gcgcaacata gctcctatag acaacgcgca cgcttgctta aagaccagct gagtcttggt 1080

aacgcggcgc tgcagattac cgacgtaaaa cttcaagacg cgggagttta tcgctgcatg 1140

atttcctacg ggggtggcgc agactataaa aggatcactg taaaggtaaa cgccgattac 1200

aaggatgacg acgataagca ccatcatcac catcactag 1239

<210> 2563
<211> 390
<212> PRT
<213> Artificial Sequence

<220>
<223> OKT3 - PD-L1 303

<400> 2563

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

```
Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Thr Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly
        115                 120                 125

Ser Gly Gly Gly Ser Ser Gln Ile Val Leu Thr Gln Ser Pro Ala Ile
    130                 135                 140

Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
145                 150                 155                 160

Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser Gly Thr Ser
                165                 170                 175

Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro
            180                 185                 190

Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
        195                 200                 205

Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
    210                 215                 220

Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Asn
225                 230                 235                 240

Arg Gly Gly Gly Asp Pro Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
                245                 250                 255

Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val
            260                 265                 270

Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu
        275                 280                 285
```

Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly
290 295 300

Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln
305 310 315 320

His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser
325 330 335

Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala
340 345 350

Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys
355 360 365

Arg Ile Thr Val Lys Val Asn Ala Asp Tyr Lys Asp Asp Asp Asp Lys
370 375 380

His His His His His His
385 390

<210> 2564
<211> 1200
<212> DNA
<213> Artificial Sequence

<220>
<223> OKT3 - PD-L2 1417

<400> 2564
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctcagg tccagctgca gcagtctggg gctgaactgg caagacctgg ggcctcagtg 120

aagatgtcct gcaaggcttc tggctacacc tttactaggt acacgatgca ctgggtaaaa 180

cagaggcctg gacagggtct ggaatggatt ggatacatta atcctagccg tggttatact 240

aattacaatc agaagttcaa ggacaaggcc acattgacta cagacaaatc ctccagcaca 300

gcctacatgc aactgagcag cctgacatct gaggactctg cagtctatta ctgtgcaaga 360

tattatgatg atcattactg ccttgactac tggggccaag gcaccacggt gaccgtgagc 420

gccgggggag gtggcagcgg gggaggtggc agcggcggcg ggagctccca aattgttctc 480

acccagtctc cagcaatcat gtctgcatct ccaggggaga aggtcaccat gacctgcagt 540

gccagctcaa gtgtaagtta catgaactgg taccagcaga agtcaggcac ctcccccaaa 600

agatggattt atgacacatc caaactggct tctggagtcc ctgctcactt caggggcagt 660

gggtctggga cctcttactc tctcacaatc agcggcatgg aggctgaaga tgctgccact 720

tattactgcc agcagtggag tagtaaccca ttcacgttcg gctcggggac aaagttggaa 780

ataaaccggg gcggtggcga tcccggatcc ggagggtctg ggggaggcgg ttctgggggt 840

ggaggctcat tattcacagt gactgttccg aaagagttgt atataatcga gcaagggagt 900

aatgttaccc tggaatgcaa ttttgacacc gggtcacacg tcaacctcgg agcgattact 960

gcttctttgc aaaaagttga aaacgacgcg tccccccata gggaaagggc gacccttctg 1020

gaggagcagt tgccccttgg cagggcactc tttcacattc cccaggtgca agtcagggac 1080

gaggggcaat accgctgcat cataatttac ggggacgcgt gggactacaa gtacttgact 1140

ctcaaagtta aagctgatta caaggatgac gacgataagc accatcatca ccatcactag 1200

<210> 2565
<211> 377
<212> PRT
<213> Artificial Sequence

<220>
<223> OKT3 - PD-L2 1417

<400> 2565

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

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Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45

Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser Ser Thr Ala Tyr
65                  70                  75                  80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Thr Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly
        115                 120                 125

Ser Gly Gly Gly Ser Ser Gln Ile Val Leu Thr Gln Ser Pro Ala Ile
    130                 135                 140

Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
145                 150                 155                 160

Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser Gly Thr Ser
                165                 170                 175

Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro
            180                 185                 190

Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
        195                 200                 205

Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
    210                 215                 220
```

```
Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Asn
225                 230                 235                 240


Arg Gly Gly Gly Asp Pro Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
                245                 250                 255


Gly Gly Gly Gly Ser Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr
            260                 265                 270


Ile Ile Glu Gln Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr
        275                 280                 285


Gly Ser His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val
    290                 295                 300


Glu Asn Asp Ala Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu
305                 310                 315                 320


Gln Leu Pro Leu Gly Arg Ala Leu Phe His Ile Pro Gln Val Gln Val
                325                 330                 335


Arg Asp Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp
            340                 345                 350


Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp Tyr Lys Asp Asp
        355                 360                 365


Asp Asp Lys His His His His His His
    370                 375
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<210> 2566
<211> 1230
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - OKT3

<400> 2566
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accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggatccgg agggtctggg 420

ggaggcggtt ctgggggtgg aggctcacag gtccagctgc agcagtctgg ggctgaactg 480

gcaagacctg gggcctcagt gaagatgtcc tgcaaggctt ctggctacac ctttactagg 540

tacacgatgc actgggtaaa acagaggcct ggacagggtc tggaatggat tggatacatt 600

aatcctagcc gtggttatac taattacaat cagaagttca aggacaaggc cacattgact 660

acagacaaat cctccagcac agcctacatg caactgagca gcctgacatc tgaggactct 720

gcagtctatt actgtgcaag atattatgat gatcattact gccttgacta ctggggccaa 780

ggcaccacgg tgaccgtgag cgccggggga ggtggcagcg ggggaggtgg cagcggcggc 840

gggagctccc aaattgttct cacccagtct ccagcaatca tgtctgcatc tccaggggag 900

aaggtcacca tgacctgcag tgccagctca agtgtaagtt acatgaactg gtaccagcag 960

aagtcaggca cctcccccaa aagatggatt tatgacacat ccaaactggc ttctggagtc 1020

cctgctcact tcaggggcag tgggtctggg acctcttact ctctcacaat cagcggcatg 1080

gaggctgaag atgctgccac ttattactgc cagcagtgga gtagtaaccc attcacgttc 1140

ggctcgggga caaagttgga aataaaccgg ggcggtggcg atcccgatta caaggatgac 1200

gacgataagc accatcatca ccatcactag 1230

<210> 2567
<211> 390
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - OKT3

<400> 2567

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Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro
    130                 135                 140


Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
145                 150                 155                 160


Arg Tyr Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu
                165                 170                 175
```

```
Trp Ile Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Asn Gln
            180                 185                 190

Lys Phe Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser Ser Thr
        195                 200                 205

Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr
    210                 215                 220

Tyr Cys Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly
225                 230                 235                 240

Gln Gly Thr Thr Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly Gly
                245                 250                 255

Gly Gly Ser Gly Gly Gly Ser Ser Gln Ile Val Leu Thr Gln Ser Pro
            260                 265                 270

Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser
        275                 280                 285

Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser Gly
    290                 295                 300

Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly
305                 310                 315                 320

Val Pro Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu
                325                 330                 335

Thr Ile Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln
            340                 345                 350

Gln Trp Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu
        355                 360                 365
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Ile Asn Arg Gly Gly Gly Asp Pro Asp Tyr Lys Asp Asp Asp Asp Lys
370 375 380

His His His His His His
385 390

<210> 2568
<211> 1191
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - OKT3

<400> 2568
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ttcacagtga ctgttccgaa agagttgtat ataatcgagc aagggagtaa tgttaccctg 120

gaatgcaatt ttgacaccgg gtcacacgtc aacctcggag cgattactgc ttctttgcaa 180

aaagttgaaa acgacgcgtc cccccatagg gaaagggcga cccttctgga ggagcagttg 240

ccccttggca gggcactctt tcacattccc caggtgcaag tcagggacga ggggcaatac 300

cgctgcatca taatttacgg ggacgcgtgg gactacaagt acttgactct caaagttaaa 360

gctggatccg gagggtctgg gggaggcggt tctgggggtg gaggctcaca ggtccagctg 420

cagcagtctg gggctgaact ggcaagacct ggggcctcag tgaagatgtc ctgcaaggct 480

tctggctaca cctttactag gtacacgatg cactgggtaa aacagaggcc tggacagggt 540

ctggaatgga ttggatacat taatcctagc cgtggttata ctaattacaa tcagaagttc 600

aaggacaagg ccacattgac tacagacaaa tcctccagca cagcctacat gcaactgagc 660

agcctgacat ctgaggactc tgcagtctat tactgtgcaa gatattatga tgatcattac 720

tgccttgact actggggcca aggcaccacg gtgaccgtga gcgccggggg aggtggcagc 780

gggggaggtg gcagcggcgg cgggagctcc caaattgttc tcacccagtc tccagcaatc 840

atgtctgcat ctccagggga gaaggtcacc atgacctgca gtgccagctc aagtgtaagt 900

tacatgaact ggtaccagca gaagtcaggc acctccccca aaagatggat ttatgacaca 960

tccaaactgg cttctggagt ccctgctcac ttcaggggca gtgggtctgg gacctcttac 1020

tctctcacaa tcagcggcat ggaggctgaa gatgctgcca cttattactg ccagcagtgg 1080

agtagtaacc cattcacgtt cggctcgggg acaaagttgg aaataaaccg gggcggtggc 1140

gatcccgatt acaaggatga cgacgataag caccatcatc accatcacta g 1191

<210> 2569
<211> 377
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - OKT3

<400> 2569

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
100 105 110

```
Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu
        115                 120                 125

Ala Arg Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr
    130                 135                 140

Thr Phe Thr Arg Tyr Thr Met His Trp Val Lys Gln Arg Pro Gly Gln
145                 150                 155                 160

Gly Leu Glu Trp Ile Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn
                165                 170                 175

Tyr Asn Gln Lys Phe Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser
            180                 185                 190

Ser Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser
        195                 200                 205

Ala Val Tyr Tyr Cys Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp
    210                 215                 220

Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ala Gly Gly Gly Gly
225                 230                 235                 240

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Gln Ile Val Leu Thr
                245                 250                 255

Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met
            260                 265                 270

Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln
        275                 280                 285

Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu
    290                 295                 300
```

```
Ala Ser Gly Val Pro Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser
305                 310                 315                 320


Tyr Ser Leu Thr Ile Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr
                325                 330                 335


Tyr Cys Gln Gln Trp Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr
            340                 345                 350


Lys Leu Glu Ile Asn Arg Gly Gly Gly Asp Pro Asp Tyr Lys Asp Asp
        355                 360                 365


Asp Asp Lys His His His His His His
    370                 375


<210>  2570
<211>  855
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  PD-L1 303 - IL16

<400>  2570
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accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa      120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg      180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc      240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg      300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg      360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggatccgg agggtctggg      420

ggaggcggtt ctgggggtgg aggctcaagc gccgcttctg cctcagcagc cagcgatgtc      480

tctgtcgaaa gcacggcgga agctactgtt tgtactgtca cccttgagaa aatgagcgcg      540
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ggtttggggt tttcactcga gggcggcaaa gggtcacttc acggcgacaa accattgaca 600

atcaatcgga tatttaaagg tgctgcctct gaacagagcg aaactgttca accgggcgat 660

gaaatactgc aactgggtgg tacagccatg cagggcctga cgcgcttcga ggcgtggaac 720

attataaaag cactgcctga tggtccagtc acaatagtca tccgccggaa atcacttcaa 780

tcaaaggaga ccaccgctgc gggagacagc gattacaagg atgacgacga taagcaccat 840

catcaccatc actag 855

<210> 2571
<211> 265
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - IL16

<400> 2571

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

```
Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val Ser Val Glu
    130                 135                 140

Ser Thr Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser
145                 150                 155                 160

Ala Gly Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly
                165                 170                 175

Asp Lys Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu
            180                 185                 190

Gln Ser Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly
        195                 200                 205

Thr Ala Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys
    210                 215                 220

Ala Leu Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu
225                 230                 235                 240

Gln Ser Lys Glu Thr Thr Ala Ala Gly Asp Ser Asp Tyr Lys Asp Asp
                245                 250                 255

Asp Asp Lys His His His His His His
            260                 265
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<210> 2572
<211> 855
<212> DNA
<213> Artificial Sequence

<220>
<223> IL16 - PD-L1 303

<400> 2572
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctagc 60

gccgcttctg cctcagcagc cagcgatgtc tctgtcgaaa gcacggcgga agctactgtt 120

tgtactgtca cccttgagaa aatgagcgcg ggtttggggt tttcactcga gggcggcaaa 180

gggtcacttc acggcgacaa accattgaca atcaatcgga tatttaaagg tgctgcctct 240

gaacagagcg aaactgttca accgggcgat gaaatactgc aactgggtgg tacagccatg 300

cagggcctga cgcgcttcga ggcgtggaac attataaaag cactgcctga tggtccagtc 360

acaatagtca tccgccggaa atcacttcaa tcaaaggaga ccaccgctgc gggagacagc 420

ggatccggag ggtctggggg aggcggttct gggggtggag gctcatttac cgtaacggtc 480

cctaaggatt tgtacgtggt tgagtacggg agcaatatga cgattgaatg caagttcccc 540

gtagagaagc agctcgattt ggccgctttg atagtgtact gggaaatgga aggaaaagac 600

atcattcaat tcgtccacgg tgaagaggat caaaaagcgc aacatagctc ctatagacaa 660

cgcgcacgct tgcttaaaga ccagctgagt cttggtaacg cggcgctgca gattaccgac 720

gtaaaacttc aagacgcggg agtttatcgc tgcatgattt cctacggggg tggcgcagac 780

tataaaagga tcactgtaaa ggtaaacgcc gattacaagg atgacgacga taagcaccat 840

catcaccatc actag 855

<210> 2573
<211> 265
<212> PRT
<213> Artificial Sequence

<220>
<223> IL16 - PD-L1 303

<400> 2573

Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val Ser Val Glu Ser Thr
1 5 10 15

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Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala Gly
            20                  25                  30

Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp Lys
        35                  40                  45

Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln Ser
    50                  55                  60

Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr Ala
65                  70                  75                  80

Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala Leu
                85                  90                  95

Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln Ser
            100                 105                 110

Lys Glu Thr Thr Ala Ala Gly Asp Ser Gly Ser Gly Gly Ser Gly Gly
        115                 120                 125

Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp
    130                 135                 140

Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe
145                 150                 155                 160

Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu
                165                 170                 175

Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln
            180                 185                 190

Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp
        195                 200                 205
```

Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu
210 215 220

Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala
225 230 235 240

Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Asp Tyr Lys Asp Asp
245 250 255

Asp Asp Lys His His His His His His
260 265

<210> 2574
<211> 825
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - IL16

<400> 2574
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcaagc 420

gccgcttctg cctcagcagc cagcgatgtc tctgtcgaaa gcacggcgga agctactgtt 480

tgtactgtca cccttgagaa aatgagcgcg ggtttggggt tttcactcga gggcggcaaa 540

gggtcacttc acggcgacaa accattgaca atcaatcgga tatttaaagg tgctgcctct 600

gaacagagcg aaactgttca accgggcgat gaaatactgc aactgggtgg tacagccatg 660

cagggcctga cgcgcttcga ggcgtggaac attataaaag cactgcctga tggtccagtc 720

acaatagtca tccgccggaa atcacttcaa tcaaaggaga ccaccgctgc gggagacagc 780

gattacaagg atgacgacga taagcaccat catcaccatc actag 825

<210> 2575
<211> 252
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - IL16

<400> 2575

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val
115 120 125

```
Ser Val Glu Ser Thr Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu
    130                 135                 140

Lys Met Ser Ala Gly Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser
145                 150                 155                 160

Leu His Gly Asp Lys Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala
                165                 170                 175

Ala Ser Glu Gln Ser Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln
            180                 185                 190

Leu Gly Gly Thr Ala Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn
        195                 200                 205

Ile Ile Lys Ala Leu Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg
    210                 215                 220

Lys Ser Leu Gln Ser Lys Glu Thr Thr Ala Ala Gly Asp Ser Asp Tyr
225                 230                 235                 240

Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
```

<210> 2576
<211> 825
<212> DNA
<213> Artificial Sequence

<220>
<223> IL16 - PD-L2 1417

<400> 2576
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agcgctagcg ccgcttctgc ctcagcagcc agcgatgtct ctgtcgaaag cacggcggaa 120

gctactgttt gtactgtcac ccttgagaaa atgagcgcgg gtttggggtt ttcactcgag 180

ggcggcaaag ggtcacttca cggcgacaaa ccattgacaa tcaatcggat atttaaaggt 240

gctgcctctg aacagagcga aactgttcaa ccgggcgatg aaatactgca actgggtggt 300

acagccatgc agggcctgac gcgcttcgag gcgtggaaca ttataaaagc actgcctgat 360

ggtccagtca caatagtcat ccgccggaaa tcacttcaat caaaggagac caccgctgcg 420

ggagacagcg gatccggagg gtctgggggа ggcggttctg ggggtggagg ctcattattc 480

acagtgactg ttccgaaaga gttgtatata atcgagcaag ggagtaatgt taccctggaa 540

tgcaattttg acaccgggtc acacgtcaac ctcggagcga ttactgcttc tttgcaaaaa 600

gttgaaaacg acgcgtcccc ccatagggaa agggcgaccc ttctggagga gcagttgccc 660

cttggcaggg cactctttca cattccccag gtgcaagtca gggacgaggg gcaataccgc 720

tgcatcataa tttacgggga cgcgtgggac tacaagtact tgactctcaa agttaaagct 780

gattacaagg atgacgacga taagcaccat catcaccatc actag 825

<210> 2577
<211> 252
<212> PRT
<213> Artificial Sequence

<220>
<223> IL16 - PD-L2 1417

<400> 2577

Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val Ser Val Glu Ser Thr
1 5 10 15

Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala Gly
20 25 30

Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp Lys
35 40 45

Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln Ser
50 55 60

```
Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr Ala
65                  70                  75                  80

Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala Leu
                85                  90                  95

Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln Ser
            100                 105                 110

Lys Glu Thr Thr Ala Ala Gly Asp Ser Gly Ser Gly Gly Ser Gly Gly
        115                 120                 125

Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe Thr Val Thr Val Pro Lys
    130                 135                 140

Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn Val Thr Leu Glu Cys Asn
145                 150                 155                 160

Phe Asp Thr Gly Ser His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu
                165                 170                 175

Gln Lys Val Glu Asn Asp Ala Ser Pro His Arg Glu Arg Ala Thr Leu
            180                 185                 190

Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala Leu Phe His Ile Pro Gln
        195                 200                 205

Val Gln Val Arg Asp Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr Gly
    210                 215                 220

Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp Tyr
225                 230                 235                 240

Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
```

<210> 2578
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2247

<400> 2578
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagat 420

actcaggaga aggaagtcag agcgatggta ggcagcgacg tggagctcag ctgcgcttgc 480

cctgaaggaa gccgttttga tttaaatgat gtttacgtat attggcaaac cagtgagtcg 540

aaaaccgtgg tgacctacca catcccacag gacagctcct tggaaaacgt ggacagccgc 600

taccggaacc gagccctgat gtcaccggcc ggcatgctgc ggggcgactt ctccctgcgc 660

ttgttcaacg tcacccccca ggacgagcag aagtttcact gcctggtgtt gagccaatcc 720

ctgggattcc aggaggtttt gagcgttgag gttacactgc atgtggcagc aaacttcagc 780

gtggattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2579
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2247

<400> 2579

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Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val
        115                 120                 125

Gly Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe
    130                 135                 140

Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr
145                 150                 155                 160

Val Val Thr Tyr His Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp
                165                 170                 175

Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg
            180                 185                 190
```

Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln
195 200 205

Lys Phe His Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val
210 215 220

Leu Ser Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp
225 230 235 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
245 250

<210> 2580
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2247 - PD-L2 1417

<400> 2580
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc 120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc 180

agtgagtcga aaaccgtggt gacctaccac atcccacagg acagctcctt ggaaaacgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agccaatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcatta 480

ttcacagtga ctgttccgaa agagttgtat ataatcgagc aagggagtaa tgttaccctg 540

gaatgcaatt ttgacaccgg gtcacacgtc aacctcggag cgattactgc ttctttgcaa 600

aaagttgaaa acgacgcgtc cccccatagg gaaagggcga cccttctgga ggagcagttg 660

ccccttggca gggcactctt tcacattccc caggtgcaag tcagggacga ggggcaatac 720

cgctgcatca taatttacgg ggacgcgtgg gactacaagt acttgactct caaagttaaa 780

gctgattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2581
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2247 - PD-L2 1417

<400> 2581

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
115 120 125

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe Thr Val Thr Val Pro
    130                 135                 140

Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn Val Thr Leu Glu Cys
145                 150                 155                 160

Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly Ala Ile Thr Ala Ser
                165                 170                 175

Leu Gln Lys Val Glu Asn Asp Ala Ser Pro His Arg Glu Arg Ala Thr
            180                 185                 190

Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala Leu Phe His Ile Pro
        195                 200                 205

Gln Val Gln Val Arg Asp Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr
    210                 215                 220

Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp
225                 230                 235                 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
```

<210> 2582
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2266

<400> 2582
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agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagat 420

actcaggaga aggaagtcag agcgatggta ggcagcgacg tggagctcag ctgcgcttgc 480

cctgaaggaa gccgttttga tttaaatgat gtttacgtat attggcaaac cagtgagtcg 540

aaaaccgtgg tgacctacca catcccacag cacagctcct tggaaaacgt ggacagccgc 600

taccggaacc gagccctgat gtcaccggcc ggcatgctgc ggggcgactt ctccctgcgc 660

ttgttcaacg tcacccccca ggacgagcag aagtttcact gcctggtgtt gagcagatcc 720

ctgggattcc aggaggtttt gagcgttgag gttacactgc atgtggcagc aaacttcagc 780

gtggattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2583
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2266

<400> 2583

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

```
Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val
        115                 120                 125

Gly Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe
    130                 135                 140

Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr
145                 150                 155                 160

Val Val Thr Tyr His Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp
                165                 170                 175

Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg
            180                 185                 190

Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln
        195                 200                 205

Lys Phe His Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val
    210                 215                 220

Leu Ser Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp
225                 230                 235                 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
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<210> 2584
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2266 - PD-L2 1417

<400> 2584
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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc 120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc 180

agtgagtcga aaaccgtggt gacctaccac atcccacagc acagctcctt ggaaaacgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agcagatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcatta 480

ttcacagtga ctgttccgaa agagttgtat ataatcgagc aagggagtaa tgttaccctg 540

gaatgcaatt ttgacaccgg gtcacacgtc aacctcggag cgattactgc ttctttgcaa 600

aaagttgaaa acgacgcgtc cccccatagg gaaagggcga cccttctgga ggagcagttg 660

ccccttggca gggcactctt tcacattccc caggtgcaag tcagggacga ggggcaatac 720

cgctgcatca taatttacgg ggacgcgtgg gactacaagt acttgactct caaagttaaa 780

gctgattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2585
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2266 - PD-L2 1417

<400> 2585

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Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
        115                 120                 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe Thr Val Thr Val Pro
    130                 135                 140

Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn Val Thr Leu Glu Cys
145                 150                 155                 160

Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly Ala Ile Thr Ala Ser
                165                 170                 175

Leu Gln Lys Val Glu Asn Asp Ala Ser Pro His Arg Glu Arg Ala Thr
            180                 185                 190
```

Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala Leu Phe His Ile Pro
195 200 205

Gln Val Gln Val Arg Asp Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr
210 215 220

Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp
225 230 235 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
245 250

<210> 2586
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2264

<400> 2586
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagat 420

actcaggaga aggaagtcag agcgatggta ggcagcgacg tggagctcag ctgcgcttgc 480

cctgaaggaa gccgttttga tttaaatgat gtttacgtat attggcaaac cagtgagtcg 540

aaaaccgtgg tgacctacca catcccacag cacagctcct tggaatatgt ggacagccgc 600

taccggaacc gagccctgat gtcaccggcc ggcatgctgc ggggcgactt ctccctgcgc 660

ttgttcaacg tcacccccca ggacgagcag aagtttcact gcctggtgtt gagcagatcc 720

ctgggattcc aggaggtttt gagcgttgag gttacactgc atgtggcagc aaacttcagc 780

gtggattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2587
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2264

<400> 2587

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val
115 120 125

```
Gly Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe
    130                 135                 140


Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr
145                 150                 155                 160


Val Val Thr Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp
                165                 170                 175


Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg
            180                 185                 190


Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln
        195                 200                 205


Lys Phe His Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val
    210                 215                 220


Leu Ser Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp
225                 230                 235                 240


Tyr Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
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<210> 2588
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2264 - PD-L2 1417

<400> 2588

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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc      120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc      180
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agtgagtcga aaaccgtggt gacctaccac atcccacagc acagctcctt ggaatatgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agcagatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcatta 480

ttcacagtga ctgttccgaa agagttgtat ataatcgagc aagggagtaa tgttaccctg 540

gaatgcaatt ttgacaccgg gtcacacgtc aacctcggag cgattactgc ttctttgcaa 600

aaagttgaaa acgacgcgtc cccccatagg gaaagggcga cccttctgga ggagcagttg 660

ccccttggca gggcactctt tcacattccc caggtgcaag tcagggacga ggggcaatac 720

cgctgcatca taatttacgg ggacgcgtgg gactacaagt acttgactct caaagttaaa 780

gctgattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2589
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2264 - PD-L2 1417

<400> 2589

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
50 55 60

```
Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
        115                 120                 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe Thr Val Thr Val Pro
    130                 135                 140

Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn Val Thr Leu Glu Cys
145                 150                 155                 160

Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly Ala Ile Thr Ala Ser
                165                 170                 175

Leu Gln Lys Val Glu Asn Asp Ala Ser Pro His Arg Glu Arg Ala Thr
            180                 185                 190

Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala Leu Phe His Ile Pro
        195                 200                 205

Gln Val Gln Val Arg Asp Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr
    210                 215                 220

Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp
225                 230                 235                 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
```

<210> 2590
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2244

<400> 2590
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agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagat 420

actcaggaga aggaagtcag agcgatggta ggcagcgacg tggagctcag ctgcgcttgc 480

cctgaaggaa gccgttttga tttaaatgat gtttacgtat attggcaaac cagtgagtcg 540

aaaaccgtgg tgacctacca catcccacag aacagctcct tggaaaacgt ggacagccgc 600

taccggaacc gagccctgat gtcaccggcc ggcatgctgc ggggcgactt ctccctgcgc 660

ttgttcaacg tcacccccca ggacgagcag aagtttcact gcctggtgtt gagccaatcc 720

ctgggattcc aggaggtttt gagcgttgag gttacactgc atgtggcagc aaacttcagc 780

gtggattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2591
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - ICOSL 2244

<400> 2591

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Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val
        115                 120                 125

Gly Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe
    130                 135                 140

Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr
145                 150                 155                 160

Val Val Thr Tyr His Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp
                165                 170                 175

Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg
            180                 185                 190
```

Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln
195 200 205

Lys Phe His Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val
210 215 220

Leu Ser Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp
225 230 235 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
245 250

<210> 2592
<211> 828
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2244 - PD-L2 1417

<400> 2592
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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc 120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc 180

agtgagtcga aaaccgtggt gacctaccac atcccacaga acagctcctt ggaaaacgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agccaatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcatta 480

ttcacagtga ctgttccgaa agagttgtat ataatcgagc aagggagtaa tgttaccctg 540

gaatgcaatt ttgacaccgg gtcacacgtc aacctcggag cgattactgc ttctttgcaa 600

aaagttgaaa acgacgcgtc cccccatagg gaaagggcga cccttctgga ggagcagttg 660

cccttggca gggcactctt tcacattccc caggtgcaag tcagggacga ggggcaatac 720

cgctgcatca taatttacgg ggacgcgtgg gactacaagt acttgactct caaagttaaa 780

gctgattaca aggatgacga cgataagcac catcatcacc atcactag 828

<210> 2593
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2244 - PD-L2 1417

<400> 2593

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
115 120 125

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe Thr Val Thr Val Pro
    130                 135                 140

Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn Val Thr Leu Glu Cys
145                 150                 155                 160

Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly Ala Ile Thr Ala Ser
                165                 170                 175

Leu Gln Lys Val Glu Asn Asp Ala Ser Pro His Arg Glu Arg Ala Thr
            180                 185                 190

Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala Leu Phe His Ile Pro
        195                 200                 205

Gln Val Gln Val Arg Asp Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr
    210                 215                 220

Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp
225                 230                 235                 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
```

<210> 2594
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2247

<400> 2594

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gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc       60

agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg      120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac      180
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tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagata ctcaggagaa ggaagtcaga 480

gcgatggtag gcagcgacgt ggagctcagc tgcgcttgcc ctgaaggaag ccgttttgat 540

ttaaatgatg tttacgtata ttggcaaacc agtgagtcga aaaccgtggt gacctaccac 600

atcccacagg acagctcctt ggaaaacgtg gacagccgct accggaaccg agccctgatg 660

tcaccggccg gcatgctgcg gggcgacttc tccctgcgct tgttcaacgt caccccccag 720

gacgagcaga agtttcactg cctggtgttg agccaatccc tgggattcca ggaggttttg 780

agcgttgagg ttacactgca tgtggcagca aacttcagcg tggattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2595
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2247

<400> 2595

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

```
Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240
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Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp
245 250 255

Asp Asp Asp Lys His His His His His His
260 265

<210> 2596
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2247 - PD-L1 303

<400> 2596
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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc 120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc 180

agtgagtcga aaaccgtggt gacctaccac atcccacagg acagctcctt ggaaaacgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agccaatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcattt 480

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 540

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 600

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 660

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 720

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 780

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccgattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2597
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2247 - PD-L1 303

<400> 2597

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln Asp Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys
130 135 140

Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys
145 150 155 160

Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp
165 170 175

Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp
180 185 190

Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys
195 200 205

Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys
210 215 220

Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly
225 230 235 240

Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Asp Tyr Lys Asp
245 250 255

Asp Asp Asp Lys His His His His His His
260 265

<210> 2598
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2266

<400> 2598
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acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagata ctcaggagaa ggaagtcaga 480

gcgatggtag gcagcgacgt ggagctcagc tgcgcttgcc ctgaaggaag ccgttttgat 540

ttaaatgatg tttacgtata ttggcaaacc agtgagtcga aaaccgtggt gacctaccac 600

atcccacagc acagctcctt ggaaaacgtg gacagccgct accggaaccg agccctgatg 660

tcaccggccg gcatgctgcg gggcgacttc tccctgcgct tgttcaacgt caccccccag 720

gacgagcaga agtttcactg cctggtgttg agcagatccc tgggattcca ggaggttttg 780

agcgttgagg ttacactgca tgtggcagca aacttcagcg tggattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2599
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2266

<400> 2599

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140


Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160


Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175


Tyr His Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr
            180                 185                 190


Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205


Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220


Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240


Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp
                245                 250                 255
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Asp Asp Asp Lys His His His His His His
260 265

<210> 2600
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2266 - PD-L1 303

<400> 2600
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tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc 180

agtgagtcga aaaccgtggt gacctaccac atcccacagc acagctcctt ggaaaacgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agcagatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcattt 480

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 540

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 600

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 660

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 720

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 780

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccgattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2601
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2266 - PD-L1 303

<400> 2601

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Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110


Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
        115                 120                 125


Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys
    130                 135                 140


Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys
145                 150                 155                 160


Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp
                165                 170                 175
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Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp
180 185 190

Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys
195 200 205

Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys
210 215 220

Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly
225 230 235 240

Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Asp Tyr Lys Asp
245 250 255

Asp Asp Asp Lys His His His His His His
260 265

<210> 2602
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2264

<400> 2602
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acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagata ctcaggagaa ggaagtcaga 480

gcgatggtag gcagcgacgt ggagctcagc tgcgcttgcc ctgaaggaag ccgttttgat 540

ttaaatgatg tttacgtata ttggcaaacc agtgagtcga aaaccgtggt gacctaccac 600

atcccacagc acagctcctt ggaatatgtg gacagccgct accggaaccg agccctgatg 660

tcaccggccg gcatgctgcg gggcgacttc tccctgcgct tgttcaacgt caccccccag 720

gacgagcaga agtttcactg cctggtgttg agcagatccc tgggattcca ggaggttttg 780

agcgttgagg ttacactgca tgtggcagca aacttcagcg tggattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2603
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2264

<400> 2603

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp
                245                 250                 255

Asp Asp Asp Lys His His His His His His
            260                 265
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<210> 2604
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2264 - PD-L1 303

<400> 2604
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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc 120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc 180

agtgagtcga aaaccgtggt gacctaccac atcccacagc acagctcctt ggaatatgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agcagatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcattt 480

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 540

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 600

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 660

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 720

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 780

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccgattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2605
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2264 - PD-L1 303

<400> 2605

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Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                  10                  15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
        115                 120                 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys
    130                 135                 140

Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys
145                 150                 155                 160

Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp
                165                 170                 175

Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp
            180                 185                 190
```

Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys
195 200 205

Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys
210 215 220

Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly
225 230 235 240

Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Asp Tyr Lys Asp
245 250 255

Asp Asp Asp Lys His His His His His His
260 265

<210> 2606
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2244

<400> 2606
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agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagata ctcaggagaa ggaagtcaga 480

gcgatggtag gcagcgacgt ggagctcagc tgcgcttgcc ctgaaggaag ccgttttgat 540

ttaaatgatg tttacgtata ttggcaaacc agtgagtcga aaaccgtggt gacctaccac 600

atcccacaga acagctcctt ggaaaacgtg gacagccgct accggaaccg agccctgatg 660

tcaccggccg gcatgctgcg gggcgacttc tccctgcgct tgttcaacgt caccccccag 720

gacgagcaga agtttcactg cctggtgttg agccaatccc tgggattcca ggaggttttg 780

agcgttgagg ttacactgca tgtggcagca aacttcagcg tggattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2607
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - ICOSL 2244

<400> 2607

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

```
Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp
                245                 250                 255

Asp Asp Asp Lys His His His His His His
            260                 265
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<210> 2608
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL 2244 - PD-L1 303

<400> 2608
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agcgctgata ctcaggagaa ggaagtcaga gcgatggtag gcagcgacgt ggagctcagc 120

tgcgcttgcc ctgaaggaag ccgttttgat ttaaatgatg tttacgtata ttggcaaacc 180

agtgagtcga aaaccgtggt gacctaccac atcccacaga acagctcctt ggaaaacgtg 240

gacagccgct accggaaccg agccctgatg tcaccggccg gcatgctgcg gggcgacttc 300

tccctgcgct tgttcaacgt caccccccag gacgagcaga agtttcactg cctggtgttg 360

agccaatccc tgggattcca ggaggttttg agcgttgagg ttacactgca tgtggcagca 420

aacttcagcg tgggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcattt 480

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 540

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 600

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 660

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 720

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 780

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccgattacaa ggatgacgac 840

gataagcacc atcatcacca tcactag 867

<210> 2609
<211> 266
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL 2244 - PD-L1 303

<400> 2609

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1   5   10   15

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly
        115                 120                 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys
    130                 135                 140

Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys
145                 150                 155                 160

Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp
                165                 170                 175

Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp
            180                 185                 190

Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys
        195                 200                 205
```

```
Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys
    210                 215                 220

Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly
225                 230                 235                 240

Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Asp Tyr Lys Asp
                245                 250                 255

Asp Asp Asp Lys His His His His His His
            260                 265
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<210> 2610
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Wildtype CD86 IgV

<400> 2610

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Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1               5                   10                  15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
            20                  25                  30

Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80
```

Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
85 90 95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala Asn
100 105 110

Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
115 120 125

Tyr Ile Asn Leu
130

<210> 2611
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CD86 2610

<400> 2611
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agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaaggggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagct 420

cctctgaaga ttcaagctta tttcaatgag actgcagacc tgccatgcca atttgcaaac 480

tctcaaaacc aaagcctgag tgagctagta gtattttggc aggaccagga aaacttggtt 540

ctgaatgagg tatacttagg caaagagaaa tttgacagtg ttcattccaa gtatatgggc 600

cgcacaagtt ttgattcgga cagttggacc ctgagacttc acaatcttca gatcaaggac 660

aagggcttgt atcaatgtat catccatcac aaaaagccca caggaatgat tcgcatccac 720

cagatgaatt ctgaactgtc agtgcttgct aacttcagtc aacctgaaat agtaccaatt 780

tctaatataa cagaaaatgt gtacataaat ttggattaca aggatgacga cgataagcac 840

catcatcacc atcactag 858

<210> 2612
<211> 263
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CD86 2610

<400> 2612

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
100 105 110

```
Gly Gly Gly Gly Ser Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu
        115                 120                 125


Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu
    130                 135                 140


Ser Glu Leu Val Val Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn
145                 150                 155                 160


Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr
                165                 170                 175


Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His
            180                 185                 190


Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His
        195                 200                 205


Lys Lys Pro Thr Gly Met Ile Arg Ile His Gln Met Asn Ser Glu Leu
    210                 215                 220


Ser Val Leu Ala Asn Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn
225                 230                 235                 240


Ile Thr Glu Asn Val Tyr Ile Asn Leu Asp Tyr Lys Asp Asp Asp Asp
                245                 250                 255


Lys His His His His His His
            260


<210>  2613
<211>  858
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  CD86 2610 - PD-L2 1417
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<400> 2613

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agcgctgctc ctctgaagat tcaagcttat ttcaatgaga ctgcagacct gccatgccaa 120

tttgcaaact ctcaaaacca aagcctgagt gagctagtag tattttggca ggaccaggaa 180

aacttggttc tgaatgaggt atacttaggc aaagagaaat ttgacagtgt tcattccaag 240

tatatgggcc gcacaagttt tgattcggac agttggaccc tgagacttca caatcttcag 300

atcaaggaca agggcttgta tcaatgtatc atccatcaca aaaagcccac aggaatgatt 360

cgcatccacc agatgaattc tgaactgtca gtgcttgcta acttcagtca acctgaaata 420

gtaccaattt ctaatataac agaaaatgtg tacataaatt tgggatccgg agggtctggg 480

ggaggcggtt ctgggggtgg aggctcatta ttcacagtga ctgttccgaa agagttgtat 540

ataatcgagc aagggagtaa tgttaccctg gaatgcaatt ttgacaccgg gtcacacgtc 600

aacctcggag cgattactgc ttctttgcaa aaagttgaaa acgacgcgtc cccccatagg 660

gaaagggcga cccttctgga ggagcagttg ccccttggca gggcactctt tcacattccc 720

caggtgcaag tcagggacga ggggcaatac cgctgcatca taatttacgg ggacgcgtgg 780

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catcatcacc atcactag 858

<210> 2614
<211> 262
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 2610 - PD-L2 1417

<400> 2614

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1 5 10 15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
20 25 30

```
Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
        35                  40                  45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
    50                  55                  60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65                  70                  75                  80

Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110

Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125

Tyr Ile Asn Leu Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
    130                 135                 140

Gly Gly Ser Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
145                 150                 155                 160

Glu Gln Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
                165                 170                 175

His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
            180                 185                 190

Asp Ala Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
        195                 200                 205

Pro Leu Gly Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp
    210                 215                 220
```

```
Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr
225                 230                 235                 240


Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp Tyr Lys Asp Asp Asp Asp
                245                 250                 255


Lys His His His His His
            260


<210>  2615
<211>  108
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Wildtype CD80 IgV

<400>  2615

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe
100 105

<210> 2616
<211> 100
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v165 IgV

<400> 2616

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val
100

<210> 2617
<211> 100
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v191 IgV

<400> 2617

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val
            100

<210> 2618
<211> 786
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CD80 2615

<400> 2618
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agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat   120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct   180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagtt 420

atccacgtga ccaaggaagt gaaagaagtg gcaacgctgt cctgtggtca caatgtttct 480

gttgaagagc tggcacaaac tcgcatctac tggcaaaagg agaagaaaat ggtgctgact 540

atgatgtctg gggacatgaa tatatggccc gagtacaaga accggaccat ctttgacatc 600

actaataacc tctccattgt gatcctggct ctgcgcccat ctgacgaggg cacatacgag 660

tgtgttgttc tgaagtatga aaaagacgct ttcaagcggg aacacctggc tgaagtgacg 720

ttatcagtca aagctgactt cgattacaag gatgacgacg ataagcacca tcatcaccat 780

cactag 786

<210> 2619
<211> 239
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L2 1417 - CD80 2615

<400> 2619

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

```
Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Val Ile His Val Thr Lys Glu Val Lys Glu Val
        115                 120                 125

Ala Thr Leu Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln
    130                 135                 140

Thr Arg Ile Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met
145                 150                 155                 160

Ser Gly Asp Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe
                165                 170                 175

Asp Ile Thr Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser
            180                 185                 190

Asp Glu Gly Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala
        195                 200                 205

Phe Lys Arg Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
    210                 215                 220

Phe Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His His
225                 230                 235
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<210> 2620
<211> 786

<212> DNA
<213> Artificial Sequence

<220>
<223> CD80 2615 - PD-L2 1417

<400> 2620
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac 120

aatgtttctg ttgaagagct ggcacaaact cgcatctact ggcaaaagga gaagaaaatg 180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacaagaa ccggaccatc 240

tttgacatca ctaataacct ctccattgtg atcctggctc tgcgcccatc tgacgagggc 300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct 360

gaagtgacgt tatcagtcaa agctgacttc ggatccggag ggtctggggg aggcggttct 420

gggggtggag gctcattatt cacagtgact gttccgaaag agttgtatat aatcgagcaa 480

gggagtaatg ttaccctgga atgcaatttt gacaccgggt cacacgtcaa cctcggagcg 540

attactgctt ctttgcaaaa agttgaaaac gacgcgtccc cccatagga aagggcgacc 600

cttctggagg agcagttgcc ccttggcagg gcactctttc acattcccca ggtgcaagtc 660

agggacgagg ggcaataccg ctgcatcata atttacgggg acgcgtggga ctacaagtac 720

ttgactctca aagttaaagc tgattacaag gatgacgacg ataagcacca tcatcaccat 780

cactag 786

<210> 2621
<211> 239
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 2615 - PD-L2 1417

<400> 2621

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

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Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Gly Ser Gly Gly
            100                 105                 110

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe Thr Val Thr
        115                 120                 125

Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn Val Thr Leu
    130                 135                 140

Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly Ala Ile Thr
145                 150                 155                 160

Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro His Arg Glu Arg
                165                 170                 175

Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala Leu Phe His
            180                 185                 190

Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr Arg Cys Ile Ile
        195                 200                 205
```

Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys
210 215 220

Ala Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His His
225 230 235

<210> 2622
<211> 762
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CD80 2616

<400> 2622
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agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagtt 420

atccacgtga ccaaggaagt gaaagaagtg gcaacgctgt cctgtggtca caatgtttct 480

ctggaagagc tggcacaaac tcgcatctac tggcaaaagg gtaagaaaat ggtgctgact 540

atgatgtctg gggacatgaa tatatggccc gagtacaaga accggaccat ctttgacatc 600

actaataacc tctccattgt gatcctggac ccacgcccat ctgacgaggg cacatacgag 660

tgtgttgttc tgaagtatga aaaagacgct ttcaagcggg aacacctggc tgaagtggat 720

tacaaggatg acgacgataa gcaccatcat caccatcact ag 762

<210> 2623
<211> 231

<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CD80 2616

<400> 2623

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Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110


Gly Gly Gly Gly Ser Val Ile His Val Thr Lys Glu Val Lys Glu Val
        115                 120                 125


Ala Thr Leu Ser Cys Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln
    130                 135                 140


Thr Arg Ile Tyr Trp Gln Lys Gly Lys Lys Met Val Leu Thr Met Met
145                 150                 155                 160
```

Ser Gly Asp Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe
165 170 175

Asp Ile Thr Asn Asn Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser
180 185 190

Asp Glu Gly Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala
195 200 205

Phe Lys Arg Glu His Leu Ala Glu Val Asp Tyr Lys Asp Asp Asp Asp
210 215 220

Lys His His His His His His
225 230

<210> 2624
<211> 762
<212> DNA
<213> Artificial Sequence

<220>
<223> CD80 2616 - PD-L2 1417

<400> 2624
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac 120

aatgtttctc tggaagagct ggcacaaact cgcatctact ggcaaaaggg taagaaaatg 180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacaagaa ccggaccatc 240

tttgacatca ctaataacct ctccattgtg atcctggacc cacgcccatc tgacgagggc 300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct 360

gaagtgggat ccggagggtc tgggggaggc ggttctgggg gtggaggctc attattcaca 420

gtgactgttc cgaaagagtt gtatataatc gagcaaggga gtaatgttac cctggaatgc 480

aattttgaca ccgggtcaca cgtcaacctc ggagcgatta ctgcttcttt gcaaaaagtt 540

gaaaacgacg cgtcccccca tagggaaagg gcgacccttc tggaggagca gttgcccctt 600

ggcagggcac tctttcacat tccccaggtg caagtcaggg acgaggggca ataccgctgc 660

atcataattt acggggacgc gtgggactac aagtacttga ctctcaaagt taaagctgat 720

tacaaggatg acgacgataa gcaccatcat caccatcact ag 762

<210> 2625
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 2616 - PD-L2 1417

<400> 2625

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
100 105 110

Gly Gly Ser Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
115 120 125

```
Glu Gln Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
    130                 135                 140

His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
145                 150                 155                 160

Asp Ala Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
                165                 170                 175

Pro Leu Gly Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp
            180                 185                 190

Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr
        195                 200                 205

Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp Tyr Lys Asp Asp Asp Asp
    210                 215                 220

Lys His His His His His His
225                 230
```

<210> 2626
<211> 762
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CD80 2617

<400> 2626
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agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat 120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct 180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag 240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag 300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc 360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcagtt 420

atccacgtga ccaaggaagt gaaagaagtg gcaacgctgt cctgtggtca caatgtttct 480

gttgaagagc tggcacaaac tcgcatctac tggcaaaagg gtaagaaaat ggtgctgact 540

atgatgtctg gggacatgaa tatatggccc gagtacgaaa accggaccat ctttgacatc 600

actaataacc tctccattgt gatcctggac ccacgcccat ctgacgaggg cacatacgag 660

tgtgttgttc tgaagtatga aaaagacgct ttcaagcggg aacacctggc tgaagtggat 720

tacaaggatg acgacgataa gcaccatcat caccatcact ag 762

<210> 2627
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CD80 2617

<400> 2627

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

```
Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Val Ile His Val Thr Lys Glu Val Lys Glu Val
        115                 120                 125

Ala Thr Leu Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln
    130                 135                 140

Thr Arg Ile Tyr Trp Gln Lys Gly Lys Lys Met Val Leu Thr Met Met
145                 150                 155                 160

Ser Gly Asp Met Asn Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe
                165                 170                 175

Asp Ile Thr Asn Asn Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser
            180                 185                 190

Asp Glu Gly Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala
        195                 200                 205

Phe Lys Arg Glu His Leu Ala Glu Val Asp Tyr Lys Asp Asp Asp Asp
    210                 215                 220

Lys His His His His His His
225                 230
```

<210> 2628
<211> 762
<212> DNA
<213> Artificial Sequence

<220>
<223> CD80 2617 - PD-L2 1417

<400> 2628

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agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac 120

aatgtttctg ttgaagagct ggcacaaact cgcatctact ggcaaaaggg taagaaaatg 180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacgaaaa ccggaccatc 240

tttgacatca ctaataacct ctccattgtg atcctggacc cacgcccatc tgacgagggc 300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct 360

gaagtgggat ccggagggtc tgggggaggc ggttctgggg gtggaggctc attattcaca 420

gtgactgttc cgaaagagtt gtatataatc gagcaaggga gtaatgttac cctggaatgc 480

aattttgaca ccgggtcaca cgtcaacctc ggagcgatta ctgcttcttt gcaaaaagtt 540

gaaaacgacg cgtcccccca tagggaaagg gcgacccttc tggaggagca gttgcccctt 600

ggcagggcac tctttcacat tccccaggtg caagtcaggg acgaggggca ataccgctgc 660

atcataattt acggggacgc gtgggactac aagtacttga ctctcaaagt taaagctgat 720

tacaaggatg acgacgataa gcaccatcat caccatcact ag 762

<210> 2629
<211> 231
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 2617 - PD-L2 1417

<400> 2629

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

```
Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
            100                 105                 110

Gly Gly Ser Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
        115                 120                 125

Glu Gln Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
    130                 135                 140

His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
145                 150                 155                 160

Asp Ala Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
                165                 170                 175

Pro Leu Gly Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp
            180                 185                 190

Glu Gly Gln Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr
        195                 200                 205

Lys Tyr Leu Thr Leu Lys Val Lys Ala Asp Tyr Lys Asp Asp Asp Asp
    210                 215                 220

Lys His His His His His His
225                 230
```

<210> 2630
<211> 897
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CD86 2610

<400> 2630
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agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagctc ctctgaagat tcaagcttat 480

ttcaatgaga ctgcagacct gccatgccaa tttgcaaact ctcaaaacca aagcctgagt 540

gagctagtag tattttggca ggaccaggaa aacttggttc tgaatgaggt atacttaggc 600

aaagagaaat ttgacagtgt tcattccaag tatatgggcc gcacaagttt tgattcggac 660

agttggaccc tgagacttca caatcttcag atcaaggaca agggcttgta tcaatgtatc 720

atccatcaca aaaagcccac aggaatgatt cgcatccacc agatgaattc tgaactgtca 780

gtgcttgcta acttcagtca acctgaaata gtaccaattt ctaatataac agaaaatgtg 840

tacataaatt tggattacaa ggatgacgac gataagcacc atcatcacca tcactag 897

<210> 2631
<211> 276
<212> PRT
<213> Artificial Sequence

<220>

<223> PD-L1 303 - CD86 2610

<400> 2631

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Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp
    130                 135                 140


Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu
145                 150                 155                 160


Val Val Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr
                165                 170                 175
```

Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg
180 185 190

Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln
195 200 205

Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro
210 215 220

Thr Gly Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu
225 230 235 240

Ala Asn Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu
245 250 255

Asn Val Tyr Ile Asn Leu Asp Tyr Lys Asp Asp Asp Asp Lys His His
260 265 270

His His His His
275

<210> 2632
<211> 897
<212> DNA
<213> Artificial Sequence

<220>
<223> CD86 2610 - PD-L1 303

<400> 2632
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agcgctgctc ctctgaagat tcaagcttat ttcaatgaga ctgcagacct gccatgccaa 120

tttgcaaact ctcaaaacca aagcctgagt gagctagtag tattttggca ggaccaggaa 180

aacttggttc tgaatgaggt atacttaggc aaagagaaat ttgacagtgt tcattccaag 240

tatatgggcc gcacaagttt tgattcggac agttggaccc tgagacttca caatcttcag 300

atcaaggaca agggcttgta tcaatgtatc atccatcaca aaaagcccac aggaatgatt 360

cgcatccacc agatgaattc tgaactgtca gtgcttgcta acttcagtca acctgaaata 420

gtaccaattt ctaatataac agaaaatgtg tacataaatt tgggatccgg agggtctggg 480

ggaggcggtt ctgggggtgg aggctcattt accgtaacgg tccctaagga tttgtacgtg 540

gttgagtacg ggagcaatat gacgattgaa tgcaagttcc ccgtagagaa gcagctcgat 600

ttggccgctt tgatagtgta ctgggaaatg gaaggaaaag acatcattca attcgtccac 660

ggtgaagagg atcaaaaagc gcaacatagc tcctatagac aacgcgcacg cttgcttaaa 720

gaccagctga gtcttggtaa cgcggcgctg cagattaccg acgtaaaact tcaagacgcg 780

ggagtttatc gctgcatgat ttcctacggg ggtggcgcag actataaaag gatcactgta 840

aaggtaaacg ccgattacaa ggatgacgac gataagcacc atcatcacca tcactag 897

<210> 2633
<211> 276
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 2610 - PD-L1 303

<400> 2633

Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu Pro
1 5 10 15

Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val Val
20 25 30

Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu Gly
35 40 45

Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr Ser
50 55 60

Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile Lys
65 70 75 80

```
Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr Gly
                85                  90                  95

Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala Asn
            100                 105                 110

Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn Val
        115                 120                 125

Tyr Ile Asn Leu Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
    130                 135                 140

Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu
145                 150                 155                 160

Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln
                165                 170                 175

Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp
            180                 185                 190

Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser
        195                 200                 205

Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly
    210                 215                 220

Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val
225                 230                 235                 240

Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile
                245                 250                 255

Thr Val Lys Val Asn Ala Asp Tyr Lys Asp Asp Asp Asp Lys His His
            260                 265                 270
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His His His His
275

<210> 2634
<211> 825
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CD80 2615

<400> 2634
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agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagtta tccacgtgac caaggaagtg 480

aaagaagtgg caacgctgtc ctgtggtcac aatgtttctg ttgaagagct ggcacaaact 540

cgcatctact ggcaaaagga gaagaaaatg gtgctgacta tgatgtctgg ggacatgaat 600

atatggcccg agtacaagaa ccggaccatc tttgacatca ctaataacct ctccattgtg 660

atcctggctc tgcgcccatc tgacgagggc acatacgagt gtgttgttct gaagtatgaa 720

aaagacgctt tcaagcggga acacctggct gaagtgacgt tatcagtcaa agctgacttc 780

gattacaagg atgacgacga taagcaccat catcaccatc actag 825

<210> 2635
<211> 252
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CD80 2615

<400> 2635

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Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
    130                 135                 140


Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
145                 150                 155                 160


Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
                165                 170                 175
```

```
Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
            180                 185                 190


Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
        195                 200                 205


Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
    210                 215                 220


Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Asp Tyr
225                 230                 235                 240


Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250


<210>  2636
<211>  825
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  CD80 2615 - PD-L1 303

<400>  2636
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc       60

agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac      120

aatgtttctg ttgaagagct ggcacaaact cgcatctact ggcaaaagga gaagaaaatg      180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacaagaa ccggaccatc      240

tttgacatca ctaataacct ctccattgtg atcctggctc tgcgcccatc tgacgagggc      300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct      360

gaagtgacgt tatcagtcaa agctgacttc ggatccggag ggtctggggg aggcggttct      420

gggggtggag gctcatttac cgtaacggtc cctaaggatt tgtacgtggt tgagtacggg      480

agcaatatga cgattgaatg caagttcccc gtagagaagc agctcgattt ggccgctttg      540
```

atagtgtact gggaaatgga aggaaaagac atcattcaat tcgtccacgg tgaagaggat 600

caaaaagcgc aacatagctc ctatagacaa cgcgcacgct tgcttaaaga ccagctgagt 660

cttggtaacg cggcgctgca gattaccgac gtaaaacttc aagacgcggg agtttatcgc 720

tgcatgattt cctacggggg tggcgcagac tataaaagga tcactgtaaa ggtaaacgcc 780

gattacaagg atgacgacga taagcaccat catcaccatc actag 825

<210> 2637
<211> 252
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 2615 - PD-L1 303

<400> 2637

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Gly Ser Gly Gly
100 105 110

```
Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val
        115                 120                 125


Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
    130                 135                 140


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
145                 150                 155                 160


Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
                165                 170                 175


Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
            180                 185                 190


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
        195                 200                 205


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
    210                 215                 220


Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Asp Tyr
225                 230                 235                 240


Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250


<210>  2638
<211>  801
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  PD-L1 303 - CD80 2616

<400>  2638
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc       60
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agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagtta tccacgtgac caaggaagtg 480

aaagaagtgg caacgctgtc ctgtggtcac aatgtttctc tggaagagct ggcacaaact 540

cgcatctact ggcaaaaggg taagaaaatg gtgctgacta tgatgtctgg ggacatgaat 600

atatggcccg agtacaagaa ccggaccatc tttgacatca ctaataacct ctccattgtg 660

atcctggacc cacgcccatc tgacgagggc acatacgagt gtgttgttct gaagtatgaa 720

aaagacgctt tcaagcggga acacctggct gaagtggatt acaaggatga cgacgataag 780

caccatcatc accatcacta g 801

<210> 2639
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CD80 2616

<400> 2639

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

```
Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
    130                 135                 140

Ser Cys Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile
145                 150                 155                 160

Tyr Trp Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
                165                 170                 175

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
            180                 185                 190

Asn Asn Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly
        195                 200                 205

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
    210                 215                 220

Glu His Leu Ala Glu Val Asp Tyr Lys Asp Asp Asp Asp Lys His His
225                 230                 235                 240
```

His His His His

<210> 2640
<211> 801
<212> DNA
<213> Artificial Sequence

<220>
<223> CD80 2616 - PD-L1 303

<400> 2640
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac 120

aatgtttctc tggaagagct ggcacaaact cgcatctact ggcaaaaggg taagaaaatg 180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacaagaa ccggaccatc 240

tttgacatca ctaataacct ctccattgtg atcctggacc cacgcccatc tgacgagggc 300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct 360

gaagtgggat ccggagggtc tgggggaggc ggttctgggg gtggaggctc atttaccgta 420

acggtcccta aggatttgta cgtggttgag tacgggagca atatgacgat tgaatgcaag 480

ttccccgtag agaagcagct cgatttggcc gctttgatag tgtactggga aatggaagga 540

aaagacatca ttcaattcgt ccacggtgaa gaggatcaaa aagcgcaaca tagctcctat 600

agacaacgcg cacgcttgct taaagaccag ctgagtcttg gtaacgcggc gctgcagatt 660

accgacgtaa aacttcaaga cgcgggagtt tatcgctgca tgatttccta cgggggtggc 720

gcagactata aaaggatcac tgtaaaggta aacgccgatt acaaggatga cgacgataag 780

caccatcatc accatcacta g 801

<210> 2641
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 2616 - PD-L1 303

<400> 2641

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Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Leu Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
            100                 105                 110


Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu
        115                 120                 125


Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln
    130                 135                 140


Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp
145                 150                 155                 160


Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser
                165                 170                 175
```

Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly
180 185 190

Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val
195 200 205

Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile
210 215 220

Thr Val Lys Val Asn Ala Asp Tyr Lys Asp Asp Asp Asp Lys His His
225 230 235 240

His His His His

<210> 2642
<211> 801
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CD80 2617

<400> 2642
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agcgctttta ccgtaacggt ccctaaggat ttgtacgtgg ttgagtacgg gagcaatatg 120

acgattgaat gcaagttccc cgtagagaag cagctcgatt tggccgcttt gatagtgtac 180

tgggaaatgg aaggaaaaga catcattcaa ttcgtccacg gtgaagagga tcaaaaagcg 240

caacatagct cctatagaca acgcgcacgc ttgcttaaag accagctgag tcttggtaac 300

gcggcgctgc agattaccga cgtaaaactt caagacgcgg gagtttatcg ctgcatgatt 360

tcctacgggg gtggcgcaga ctataaaagg atcactgtaa aggtaaacgc cggatccgga 420

gggtctgggg gaggcggttc tgggggtgga ggctcagtta tccacgtgac caaggaagtg 480

aaagaagtgg caacgctgtc ctgtggtcac aatgtttctg ttgaagagct ggcacaaact 540

cgcatctact ggcaaaaggg taagaaaatg gtgctgacta tgatgtctgg ggacatgaat 600

atatggcccg agtacgaaaa ccggaccatc tttgacatca ctaataacct ctccattgtg 660

atcctggacc cacgcccatc tgacgagggc acatacgagt gtgttgttct gaagtatgaa 720

aaagacgctt tcaagcggga acacctggct gaagtggatt acaaggatga cgacgataag 780

caccatcatc accatcacta g 801

<210> 2643
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CD80 2617

<400> 2643

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

```
Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
    130                 135                 140

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
145                 150                 155                 160

Tyr Trp Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
                165                 170                 175

Met Asn Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe Asp Ile Thr
            180                 185                 190

Asn Asn Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly
        195                 200                 205

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
    210                 215                 220

Glu His Leu Ala Glu Val Asp Tyr Lys Asp Asp Asp Asp Lys His His
225                 230                 235                 240

His His His His
```

<210> 2644
<211> 801
<212> DNA
<213> Artificial Sequence

<220>
<223> CD80 2617 - PD-L1 303

<400> 2644
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc 60

agcgctgtta tccacgtgac caaggaagtg aaagaagtgg caacgctgtc ctgtggtcac 120

aatgtttctg ttgaagagct ggcacaaact cgcatctact ggcaaaaggg taagaaaatg 180

gtgctgacta tgatgtctgg ggacatgaat atatggcccg agtacgaaaa ccggaccatc 240

tttgacatca ctaataacct ctccattgtg atcctggacc cacgcccatc tgacgagggc 300

acatacgagt gtgttgttct gaagtatgaa aaagacgctt tcaagcggga acacctggct 360

gaagtgggat ccggagggtc tgggggaggc ggttctgggg gtggaggctc atttaccgta 420

acggtcccta aggatttgta cgtggttgag tacgggagca atatgacgat tgaatgcaag 480

ttccccgtag agaagcagct cgatttggcc gctttgatag tgtactggga aatggaagga 540

aaagacatca ttcaattcgt ccacggtgaa gaggatcaaa aagcgcaaca tagctcctat 600

agacaacgcg cacgcttgct taaagaccag ctgagtcttg gtaacgcggc gctgcagatt 660

accgacgtaa aacttcaaga cgcgggagtt tatcgctgca tgatttccta cgggggtggc 720

gcagactata aaaggatcac tgtaaaggta aacgccgatt acaaggatga cgacgataag 780

caccatcatc accatcacta g 801

<210> 2645
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 2617 - PD-L1 303

<400> 2645

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Gly Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

```
Ile Trp Pro Glu Tyr Glu Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
            100                 105                 110

Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu
        115                 120                 125

Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln
    130                 135                 140

Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp
145                 150                 155                 160

Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser
                165                 170                 175

Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly
            180                 185                 190

Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val
        195                 200                 205

Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile
    210                 215                 220

Thr Val Lys Val Asn Ala Asp Tyr Lys Asp Asp Asp Asp Lys His His
225                 230                 235                 240
```

His His His His

<210> 2646
<211> 873
<212> DNA
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L1 303

<400> 2646
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctaag 60

gcgatgcacg tagcccagcc cgctgttgtt ctcgcaagtt ctcgcggcat agcctccttc 120

gtatgtgagt atgccagtcc aggtaagtac acggaggtac gggtaactgt actgcggcag 180

gccgattccc aggttacgga ggtttgtgcg gcaacctaca tgatgggtaa cgagcttaca 240

tttctcgacg actcaatatg tactgggacc tcctcaggaa atcaggtcaa tctgaccatc 300

caaggtctga gggcgatgga tacgggtctt tatatttgca aggttgaact catgtatccg 360

cctccatact atgaaggcat tggaaatgga acacaaatct atgttattga cccggagccg 420

tctccagata gtgatcaggg atccggaggg tctgggggag gcggttctgg gggtggaggc 480

tcatttaccg taacggtccc taaggatttg tacgtggttg agtacgggag caatatgacg 540

attgaatgca agttccccgt agagaagcag ctcgatttgg ccgctttgat agtgtactgg 600

gaaatggaag gaaaagacat cattcaattc gtccacggtg aagaggatca aaaagcgcaa 660

catagctcct atagacaacg cgcacgcttg cttaaagacc agctgagtct tggtaacgcg 720

gcgctgcaga ttaccgacgt aaaacttcaa gacgcgggag tttatcgctg catgatttcc 780

tacgggggtg gcgcagacta taaaaggatc actgtaaagg taaacgccga ttacaaggat 840

gacgacgata agcaccatca tcaccatcac tag 873

<210> 2647
<211> 271

<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L1 303

<400> 2647

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Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp Gln Gly
        115                 120                 125


Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr
    130                 135                 140


Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met
145                 150                 155                 160
```

Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala
165 170 175

Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val
180 185 190

His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg
195 200 205

Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln
210 215 220

Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile
225 230 235 240

Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn
245 250 255

Ala Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His His
260 265 270

<210> 2648
<211> 834
<212> DNA
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L2 1417

<400> 2648
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gcgatgcacg tagcccagcc cgctgttgtt ctcgcaagtt ctcgcggcat agcctccttc 120

gtatgtgagt atgccagtcc aggtaagtac acggaggtac gggtaactgt actgcggcag 180

gccgattccc aggttacgga ggtttgtgcg gcaacctaca tgatgggtaa cgagcttaca 240

tttctcgacg actcaatatg tactgggacc tcctcaggaa atcaggtcaa tctgaccatc 300

caaggtctga gggcgatgga tacgggtctt tatatttgca aggttgaact catgtatccg 360

cctccatact atgaaggcat tggaaatgga acacaaatct atgttattga cccggagccg 420

tctccagata gtgatcaggg atccggaggg tctgggggag gcggttctgg gggtggaggc 480

tcattattca cagtgactgt tccgaaagag ttgtatataa tcgagcaagg gagtaatgtt 540

accctggaat gcaattttga caccgggtca cacgtcaacc tcggagcgat tactgcttct 600

ttgcaaaaag ttgaaaacga cgcgtccccc catagggaaa gggcgaccct tctggaggag 660

cagttgcccc ttggcagggc actctttcac attccccagg tgcaagtcag ggacgagggg 720

caataccgct gcatcataat ttacggggac gcgtgggact acaagtactt gactctcaaa 780

gttaaagctg attacaagga tgacgacgat aagcaccatc atcaccatca ctag 834

<210> 2649
<211> 258
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 2520 - PD-L2 1417

<400> 2649

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

```
Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp Gln Gly
        115                 120                 125

Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Leu Phe
    130                 135                 140

Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly Ser Asn
145                 150                 155                 160

Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly
                165                 170                 175

Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser Pro His
            180                 185                 190

Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Arg Ala
        195                 200                 205

Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr Arg
    210                 215                 220

Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu Thr Leu
225                 230                 235                 240

Lys Val Lys Ala Asp Tyr Lys Asp Asp Asp Asp Lys His His His His
                245                 250                 255

His His
```

<210> 2650
<211> 873
<212> DNA
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CTLA-4 2520

<400> 2650
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctttt 60

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggatccgg agggtctggg 420

ggaggcggtt ctgggggtgg aggctcaaag gcgatgcacg tagcccagcc cgctgttgtt 480

ctcgcaagtt ctcgcggcat agcctccttc gtatgtgagt atgccagtcc aggtaagtac 540

acggaggtac gggtaactgt actgcggcag gccgattccc aggttacgga ggtttgtgcg 600

gcaacctaca tgatgggtaa cgagcttaca tttctcgacg actcaatatg tactgggacc 660

tcctcaggaa atcaggtcaa tctgaccatc caaggtctga gggcgatgga tacgggtctt 720

tatatttgca aggttgaact catgtatccg cctccatact atgaaggcat tggaaatgga 780

acacaaatct atgttattga cccggagccg tctccagata gtgatcagga ttacaaggat 840

gacgacgata agcaccatca tcaccatcac tag 873

<210> 2651
<211> 271
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L1 303 - CTLA-4 2520

<400> 2651

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser
    130                 135                 140

Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys
145                 150                 155                 160

Tyr Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val
                165                 170                 175

Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe
            180                 185                 190
```

```
Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn
        195                 200                 205


Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys
    210                 215                 220


Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn
225                 230                 235                 240


Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp
                245                 250                 255


Gln Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His His
            260                 265                 270


<210>  2652
<211>  843
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  PD-L2 1417 - CTLA-4 2520

<400>  2652
gccgccacca tggggtcaac cgccatcctc gccctcctcc tggctgttct ccaaggagtc       60

agcgctttat tcacagtgac tgttccgaaa gagttgtata taatcgagca agggagtaat      120

gttaccctgg aatgcaattt tgacaccggg tcacacgtca acctcggagc gattactgct      180

tctttgcaaa aagttgaaaa cgacgcgtcc ccccataggg aaagggcgac ccttctggag      240

gagcagttgc cccttggcag ggcactcttt cacattcccc aggtgcaagt cagggacgag      300

gggcaatacc gctgcatcat aatttacggg gacgcgtggg actacaagta cttgactctc      360

aaagttaaag ctggatccgg agggtctggg ggaggcggtt ctgggggtgg aggctcaaag      420

gcgatgcacg tagcccagcc cgctgttgtt ctcgcaagtt ctcgcggcat agcctccttc      480

gtatgtgagt atgccagtcc aggtaagtac acggaggtac gggtaactgt actgcggcag      540
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gccgattccc aggttacgga ggtttgtgcg gcaacctaca tgatgggtaa cgagcttaca 600

tttctcgacg actcaatatg tactgggacc tcctcaggaa atcaggtcaa tctgaccatc 660

caaggtctga gggcgatgga tacgggtctt tatatttgca aggttgaact catgtatccg 720

cctccatact atgaaggcat tggaaatgga acacaaatct atgttattga cccggagccg 780

tctccagata gtgatcagga ttacaaggat gacgacgata agcaccatca tcaccatcac 840

tag 843

<210> 2653
<211> 258
<212> PRT
<213> Artificial Sequence

<220>
<223> PD-L2 1417 - CTLA-4 2520

<400> 2653

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

```
Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val
        115                 120                 125

Leu Ala Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser
    130                 135                 140

Pro Gly Lys Tyr Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp
145                 150                 155                 160

Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu
                165                 170                 175

Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn
            180                 185                 190

Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu
        195                 200                 205

Tyr Ile Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly
    210                 215                 220

Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro
225                 230                 235                 240

Asp Ser Asp Gln Asp Tyr Lys Asp Asp Asp Asp Lys His His His His
                245                 250                 255

His His
```

<210> 2654
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD80 WT IgV

<400> 2654

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val
            100

<210> 2655
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 wild-type ECD

<400> 2655

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

```
Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gln
        115                 120                 125
```

<210> 2656
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v196 ECD

<400> 2656

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Glu Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2657
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v197 ECD

<400> 2657

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2658
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v198 ECD

<400>  2658

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2659
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v199 ECD

<400> 2659

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2660
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v200 ECD

<400>  2660
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2661
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v201 ECD

<400> 2661

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2662
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v202 ECD

<400>  2662

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2663
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v203 ECD

<400>  2663

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2664
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v204 ECD

<400> 2664

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2665
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v205 ECD

<400> 2665

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2666
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v206 ECD

<400>  2666

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2667
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v207 ECD

<400> 2667

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2668
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v208 ECD

<400>  2668

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Ala Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2669
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v209 ECD

<400> 2669

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2670
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v210 ECD

<400>  2670

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2671
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v211 ECD

<400> 2671

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Asn Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2672
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v212 ECD

<400>  2672

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2673
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v213 ECD

<400> 2673

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Thr Ser Gly Asp Leu Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Gln Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2674
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v214 ECD

<400> 2674

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Arg Lys Asp Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2675
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v215 ECD

<400>  2675

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Ala Asp Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2676
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v216 ECD

<400> 2676

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Asp Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Arg Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2677
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v217 ECD

<400>  2677

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Pro Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2678
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v218 ECD

<400> 2678

```
Val Ile His Val Thr Lys Asp Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2679
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v219 ECD

<400>  2679

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2680
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v220 ECD

<400>  2680

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Arg Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Glu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2681
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v221 ECD

<400> 2681

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Lys Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2682
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v222 ECD

<400>  2682

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Ser Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Leu Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2683
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v223 ECD

<400> 2683

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Leu Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Thr
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2684
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v224 ECD

<400>  2684
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Gln Lys His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2685
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v225 ECD

<400> 2685

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Lys Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Glu Asp Ala Phe Arg Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2686
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v226 ECD

<400>  2686

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Ala Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2687
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v227 ECD

<400> 2687

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Glu Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2688
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v228 ECD

<400> 2688

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2689
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v229 ECD

<400> 2689

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Ala Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Phe Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2690
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v230 ECD

<400>  2690

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Glu Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2691
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v231 ECD

<400> 2691

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Ser Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2692
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v232 ECD

<400>  2692

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2693
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v233 ECD

<400> 2693

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2694
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v234 ECD

<400>  2694

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2695
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v235 ECD

<400> 2695

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2696
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v236 ECD

<400>  2696

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2697
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v237 ECD

<400> 2697

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2698
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v238 ECD

<400> 2698

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2699
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v239 ECD

<400>  2699

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2700
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v240 ECD

<400> 2700

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2701
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v241 ECD

<400>  2701

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Val Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2702
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v242 ECD

<400> 2702

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ala Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Ala Val Leu Lys His Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Met Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2703
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v243 ECD

<400> 2703

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

```
Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2704
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v244 ECD

<400>  2704

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Thr Arg Val His
                85                  90                  95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2705
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v245 ECD

<400> 2705

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Lys
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2706
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v246 ECD

<400>  2706

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asp
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2707
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v247 ECD

<400> 2707

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Ile Asn
35 40 45

Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2708
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v248 ECD

<400>  2708
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2709
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v249 ECD

<400> 2709

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2710
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v250 ECD

<400>  2710

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2711
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v251 ECD

<400> 2711

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2712
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v252 ECD

<400> 2712

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Gln Glu Glu Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2713
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v253 ECD

<400> 2713

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Asn Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2714
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v254 ECD

<400>  2714

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2715
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v255 ECD

<400> 2715

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2716
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v256 ECD

<400>  2716

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2717
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v257 ECD

<400>  2717

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2718
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v258 ECD

<400>  2718

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2719
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v259 ECD

<400> 2719

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Val Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2720
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v260 ECD

<400>  2720

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Cys Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2721
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v261 ECD

<400>  2721

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Asp Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2722
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v262 ECD

<400> 2722

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Lys
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2723
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v263 ECD

<400>  2723

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2724
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v264 ECD

<400> 2724

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Thr
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2725
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v265 ECD

<400>  2725

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2726
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v266 ECD

<400> 2726

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2727
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v267 ECD

<400> 2727

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2728
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v268 ECD

<400>  2728

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2729
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v269 ECD

<400> 2729

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2730
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v270 ECD

<400>  2730

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2731
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v271 ECD

<400> 2731

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Met Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2732
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v272 ECD

<400>  2732
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Val Asp
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2733
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v273 ECD

<400> 2733

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2734
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v274 ECD

<400>  2734

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Leu Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2735
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v275 ECD

<400>  2735

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2736
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v276 ECD

<400> 2736

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Ser Met Val Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Met Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2737
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v277 ECD

<400> 2737

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asp Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2738
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v278 ECD

<400>  2738

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ala Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Glu Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2739
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v279 ECD

<400> 2739

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Glu Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2740
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v280 ECD

<400>  2740

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2741
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v281 ECD

<400> 2741

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Tyr Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2742
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v282 ECD

<400>  2742

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Val Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Asp Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2743
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v283 ECD

<400> 2743

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Asp Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2744
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v284 ECD

<400>  2744

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 2745
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v285 ECD

<400> 2745

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

```
Ile Trp Pro Glu His Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2746
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v286 ECD

<400> 2746

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Val His Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Lys Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2747
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v287 ECD

<400>  2747

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Phe Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2748
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v288 ECD

<400> 2748

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Thr Val Leu Thr Met Met Ser Gly Glu Val Ser
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2749
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v289 ECD

<400>  2749

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Lys
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Leu Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 2750
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v290 ECD

<400> 2750

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Thr Val Leu Thr Met Val Ser Gly Asp Val Arg
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2751
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v291 ECD

<400>  2751

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Tyr Arg Ile Tyr Trp
            20                  25                  30


His Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  2752
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v196 IgV

<400>  2752

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Glu Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2753
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v197 IgV

<400> 2753

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2754
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v198 IgV

<400>  2754

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 2755
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v199 IgV

<400> 2755

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2756
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v200 IgV

<400> 2756

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2757
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v201 IgV

<400>  2757

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2758
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v202 IgV

<400>  2758

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2759
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v203 IgV

<400> 2759

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2760
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v204 IgV

<400> 2760

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2761
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v205 IgV

<400> 2761

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2762
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v206 IgV

<400>  2762

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2763
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v207 IgV

<400> 2763

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
            100

<210> 2764
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v208 IgV

<400> 2764

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Ala Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2765
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v209 IgV

<400> 2765

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2766
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v210 IgV

<400> 2766

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2767
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v211 IgV

<400>  2767

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Asn Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2768
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v212 IgV

<400>  2768

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 2769
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v213 IgV

<400> 2769

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Thr Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Gln Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2770
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v214 IgV

<400> 2770

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2771
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v215 IgV

<400> 2771

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Ala Asp Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2772
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v216 IgV

<400>  2772

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Asp Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Arg Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2773
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v217 IgV

<400> 2773

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Pro Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2774
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v218 IgV

<400> 2774

Val Ile His Val Thr Lys Asp Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Gln Ala Glu Val Thr
            100

<210> 2775
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v219 IgV

<400> 2775

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2776
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v220 IgV

<400> 2776

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Arg Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Glu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2777
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v221 IgV

<400> 2777

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Lys Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100



<210>  2778
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v222 IgV

<400>  2778

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Ser Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Leu Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 2779
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v223 IgV

<400> 2779

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly Leu Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Thr
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2780
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v224 IgV

<400> 2780

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Gln Lys His
                85 90 95

Leu Ala Glu Val Thr
            100

<210> 2781
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v225 IgV

<400> 2781

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20 25 30

Lys Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Glu Asp Ala Phe Arg Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2782
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v226 IgV

<400>  2782

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Ala Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2783
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v227 IgV

<400>  2783

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Glu Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2784
<211>  101
```

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v228 IgV

<400> 2784

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 2785
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v229 IgV

<400> 2785

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly Tyr Asn Ala Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Phe Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2786
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v230 IgV

<400> 2786

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Glu Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2787
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v231 IgV

<400> 2787

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Ser Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
            100

<210> 2788
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v232 IgV

<400> 2788

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2789
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v233 IgV

<400> 2789

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2790
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v234 IgV

<400> 2790

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Gln Ala Glu Val Thr
            100

<210> 2791
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v235 IgV

<400> 2791

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

```
Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2792
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v236 IgV

<400>  2792

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 2793
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v237 IgV

<400> 2793

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Gln Ala Glu Val Thr
100

<210> 2794
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v238 IgV

<400> 2794

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Gln Ala Glu Val Thr
            100

<210> 2795
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v239 IgV

<400> 2795

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
            20   25   30

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2796
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v240 IgV

<400>  2796

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Gln Ala Glu Val Thr
100

<210> 2797
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v241 IgV

<400> 2797

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Val Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2798
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v242 IgV

<400> 2798

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ala Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Ala Val Leu Lys His Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Met Ala Glu Val Thr
            100

<210> 2799
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v243 IgV

<400> 2799

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Gln Ala Glu Val Thr
100

<210> 2800
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v244 IgV

<400> 2800

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Thr Arg Val His
85 90 95

Gln Ala Glu Val Thr
100

<210> 2801
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v245 IgV

<400> 2801

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2802
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v246 IgV

<400>  2802

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asp
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 2803
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v247 IgV

<400> 2803

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Ile Asn
        35   40   45

Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2804
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v248 IgV

<400> 2804

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85 90 95

Leu Ala Glu Val Thr
            100

<210> 2805
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v249 IgV

<400> 2805

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2806
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v250 IgV

<400>  2806

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2807
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v251 IgV

<400> 2807

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2808
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v252 IgV

<400> 2808

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Gln Glu Glu Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2809
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v253 IgV

<400> 2809

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Asn Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2810
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v254 IgV

<400> 2810

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2811
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v255 IgV

<400> 2811

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 2812
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v256 IgV

<400> 2812

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2813
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v257 IgV

<400> 2813

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2814
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v258 IgV

<400> 2814

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2815
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v259 IgV

<400>  2815

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Val Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2816
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v260 IgV

<400>  2816

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Cys Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 2817
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v261 IgV

<400> 2817

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Asp Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2818
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v262 IgV

<400> 2818

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2819
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v263 IgV

<400> 2819

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2820
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v264 IgV

<400>  2820

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Thr
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2821
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v265 IgV

<400> 2821

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2822
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v266 IgV

<400> 2822

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 2823
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v267 IgV

<400> 2823

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2824
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v268 IgV

<400> 2824

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2825
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v269 IgV

<400> 2825

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2826
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v270 IgV

<400>  2826

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 2827
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v271 IgV

<400> 2827

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Met Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2828
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v272 IgV

<400> 2828

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Val Asp
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2829
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v273 IgV

<400> 2829

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Leu Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2830
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v274 IgV

<400> 2830

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Leu Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2831
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v275 IgV

<400> 2831

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2832
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v276 IgV

<400> 2832

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Val Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Met Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2833
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v277 IgV

<400> 2833

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asp Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2834
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v278 IgV

<400> 2834

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ala Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Glu Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 2835
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v279 IgV

<400> 2835

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Glu Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 2836
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v280 IgV

<400> 2836

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2837
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v281 IgV

<400> 2837

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Tyr Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2838
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v282 IgV

<400> 2838

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Val Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Asp Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2839
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v283 IgV

<400> 2839

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Asp Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr
            100


<210>  2840
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v284 IgV

<400>  2840

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Gln Ala Glu Val Thr
100

<210> 2841
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v285 IgV

<400> 2841

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu His Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Arg Ala Glu Val Thr
100

<210> 2842
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v286 IgV

<400> 2842

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Asp Val His Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Lys Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 2843
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v287 IgV

<400> 2843

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

```
Leu Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Phe Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  2844
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v288 IgV

<400>  2844

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Thr Val Leu Thr Met Met Ser Gly Glu Val Ser
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2845
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v289 IgV

<400> 2845

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Leu Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2846
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v290 IgV

<400> 2846

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Thr Val Leu Thr Met Val Ser Gly Asp Val Arg
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 2847
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v291 IgV

<400> 2847

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Tyr Arg Ile Tyr Trp
20 25 30

His Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 2848
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v196 IgV

<400> 2848

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Glu Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2849
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v197 IgV

<400> 2849

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2850
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v198 IgV

<400>  2850

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2851
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v199 IgV

<400> 2851

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2852
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v200 IgV

<400> 2852

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100 105

<210> 2853
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v201 IgV

<400> 2853

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2854
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v202 IgV

<400> 2854

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2855
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v203 IgV

<400> 2855

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2856
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v204 IgV

<400> 2856

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2857
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v205 IgV

<400> 2857

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2858
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v206 IgV

<400>  2858

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2859
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v207 IgV

<400> 2859

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2860
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v208 IgV

<400>  2860

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Ala Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2861
<211>  107
<212>  PRT
<213>  Artificial Sequence
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<220>
<223> CD80 v209 IgV

<400> 2861

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2862
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v210 IgV

<400> 2862

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2863
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v211 IgV

<400> 2863

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Asn Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2864
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v212 IgV

<400>  2864

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2865
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v213 IgV

<400> 2865

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Thr Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Gln Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2866
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v214 IgV

<400> 2866

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2867
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v215 IgV

<400> 2867

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Ala Asp Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2868
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v216 IgV

<400>  2868

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Asp Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Arg Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2869
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v217 IgV

<400> 2869

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Pro Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2870
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v218 IgV

<400> 2870

```
Val Ile His Val Thr Lys Asp Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2871
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v219 IgV

<400> 2871

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2872
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v220 IgV

<400> 2872

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Arg Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Glu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2873
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v221 IgV

<400> 2873

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Lys Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2874
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v222 IgV

<400>  2874

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Ser Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Leu Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2875
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v223 IgV

<400> 2875

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Thr
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2876
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v224 IgV

<400> 2876

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Gln Lys His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2877
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v225 IgV

<400>  2877

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Lys Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Glu Asp Ala Phe Arg Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2878
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v226 IgV

<400>  2878

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Ala Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2879
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v227 IgV

<400> 2879

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Glu Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2880
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v228 IgV

<400> 2880

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asp Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2881
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v229 IgV

<400> 2881

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly Tyr Asn Ala Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Glu Phe Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2882
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v230 IgV

<400>  2882

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Glu Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2883
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v231 IgV

<400> 2883

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Ser Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2884
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v232 IgV

<400>  2884

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2885
<211>  107
<212>  PRT
<213>  Artificial Sequence
```

<220>
<223> CD80 v233 IgV

<400> 2885

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Trp Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2886
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v234 IgV

<400> 2886

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2887
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v235 IgV

<400> 2887

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

```
Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2888
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v236 IgV

<400>  2888

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2889
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v237 IgV

<400> 2889

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2890
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v238 IgV

<400> 2890

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2891
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v239 IgV

<400> 2891

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
            20                  25                  30
```

```
Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2892
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v240 IgV

<400>  2892

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2893
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v241 IgV

<400> 2893

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Val Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2894
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v242 IgV

<400> 2894

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ala Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Ala Val Leu Lys His Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Met Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2895
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v243 IgV

<400> 2895

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2896
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v244 IgV

<400> 2896

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Thr Arg Val His
85 90 95

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2897
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v245 IgV

<400> 2897

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2898
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v246 IgV

<400>  2898

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Leu Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asp
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2899
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v247 IgV

<400> 2899

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Ile Asn
        35   40   45

Val Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2900
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v248 IgV

<400> 2900

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2901
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v249 IgV

<400> 2901

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2902
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v250 IgV

<400>  2902

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2903
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v251 IgV

<400> 2903

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2904
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v252 IgV

<400> 2904

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Gln Glu Glu Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2905
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v253 IgV

<400> 2905

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Asn Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2906
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v254 IgV

<400>  2906

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2907
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v255 IgV

<400> 2907

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2908
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v256 IgV

<400> 2908

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2909
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v257 IgV

<400> 2909

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2910
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v258 IgV

<400> 2910

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2911
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v259 IgV

<400> 2911

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Val Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2912
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v260 IgV

<400>  2912

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Val Cys Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2913
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v261 IgV

<400> 2913

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Asp Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2914
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v262 IgV

<400> 2914

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2915
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v263 IgV

<400> 2915

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

```
Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2916
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v264 IgV

<400>  2916

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Thr
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2917
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v265 IgV

<400> 2917

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2918
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v266 IgV

<400> 2918

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2919
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v267 IgV

<400> 2919

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2920
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v268 IgV

<400> 2920

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2921
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v269 IgV

<400> 2921

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Ile Ser Gly Asp Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2922
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v270 IgV

<400>  2922

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Tyr Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2923
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v271 IgV

<400> 2923

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly Tyr Asn Val Ser Val Glu Glu Leu Glu Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Met Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2924
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v272 IgV

<400> 2924

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Val Asp
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2925
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v273 IgV

<400>  2925

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Leu Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2926
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v274 IgV

<400> 2926

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Leu Glu Glu Leu Ala His Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Ile Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2927
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v275 IgV

<400> 2927

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Leu Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Gln Lys Tyr Asp Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2928
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v276 IgV

<400> 2928

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Ser Met Val Ser Gly Asp Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Met Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2929
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v277 IgV

<400> 2929

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asp Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2930
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v278 IgV

<400> 2930

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ala Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Asp Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Glu Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2931
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v279 IgV

<400> 2931

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Glu Val Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Glu Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2932
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v280 IgV

<400> 2932

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Val Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Asn Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2933
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v281 IgV

<400> 2933

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Tyr Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 2934
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v282 IgV

<400> 2934

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Val Met Ser Gly Asp Val Asn
        35                  40                  45

Ile Trp Pro Asp Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2935
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v283 IgV

<400> 2935

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Asp Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Leu Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Met Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2936
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v284 IgV

<400>  2936

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Ser Met Met Ser Gly Asp Val Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Gln Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2937
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v285 IgV

<400> 2937

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu His Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2938
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v286 IgV

<400> 2938

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Asp Val His Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Lys Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2939
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v287 IgV

<400> 2939

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Leu Lys Asp Lys Lys Met Val Leu Thr Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Phe Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  2940
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v288 IgV

<400>  2940

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Thr Val Leu Thr Met Met Ser Gly Glu Val Ser
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2941
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v289 IgV

<400> 2941

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Arg Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Val Lys
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Met Lys Tyr Glu Lys Asp Ala Leu Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2942
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v290 IgV

<400> 2942

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Asp Lys Lys Thr Val Leu Thr Met Val Ser Gly Asp Val Arg
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Gln Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 2943
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v291 IgV

<400> 2943

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Tyr Arg Ile Tyr Trp
20 25 30

His Lys Asp Lys Lys Met Val Leu Thr Met Met Ser Gly Val Ile Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Gly Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 2944
<211> 188
<212> PRT
<213> Artificial Sequence

<220>
<223> tCD28

<400> 2944

Met Leu Arg Leu Leu Leu Ala Leu Asn Leu Phe Pro Ser Ile Gln Val
1 5 10 15

Thr Gly Asn Lys Ile Leu Val Lys Gln Ser Pro Met Leu Val Ala Tyr
20 25 30

```
Asp Asn Ala Val Asn Leu Ser Cys Lys Tyr Ser Tyr Asn Leu Phe Ser
        35                  40                  45

Arg Glu Phe Arg Ala Ser Leu His Lys Gly Leu Asp Ser Ala Val Glu
    50                  55                  60

Val Cys Val Val Tyr Gly Asn Tyr Ser Gln Gln Leu Gln Val Tyr Ser
65                  70                  75                  80

Lys Thr Gly Phe Asn Cys Asp Gly Lys Leu Gly Asn Glu Ser Val Thr
                85                  90                  95

Phe Tyr Leu Gln Asn Leu Tyr Val Asn Gln Thr Asp Ile Tyr Phe Cys
            100                 105                 110

Lys Ile Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Lys Ser
        115                 120                 125

Asn Gly Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro
    130                 135                 140

Leu Phe Pro Gly Pro Ser Lys Pro Phe Trp Val Leu Val Val Val Gly
145                 150                 155                 160

Gly Val Leu Ala Cys Tyr Ser Leu Leu Val Thr Val Ala Phe Ile Ile
                165                 170                 175

Phe Trp Val Arg Ser Lys Arg Ser Arg Leu Leu His
            180                 185
```

<210> 2945
<211> 383
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 ECD

<400> 2945

```
Met Gly Val Leu Leu Thr Gln Arg Thr Leu Leu Ser Leu Val Leu Ala
1               5                  10                  15

Leu Leu Phe Pro Ser Met Ala Ser Met Ala Met His Val Ala Gln Pro
            20                  25                  30

Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu
        35                  40                  45

Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg Val Thr Val Leu Arg
    50                  55                  60

Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met
65                  70                  75                  80

Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser
                85                  90                  95

Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp
            100                 105                 110

Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr
        115                 120                 125

Tyr Leu Gly Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu
    130                 135                 140

Pro Cys Pro Asp Ser Asp Gln Glu Pro Lys Ser Ser Asp Lys Thr His
145                 150                 155                 160

Thr Ser Pro Pro Ser Pro Ala Pro Glu Leu Leu Gly Gly Ser Ser Val
                165                 170                 175

Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
            180                 185                 190
```

```
Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
        195                 200                 205

Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
    210                 215                 220

Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser
225                 230                 235                 240

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
                245                 250                 255

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile
            260                 265                 270

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
        275                 280                 285

Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
    290                 295                 300

Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
305                 310                 315                 320

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
                325                 330                 335

Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
            340                 345                 350

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
        355                 360                 365

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 2946
<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> LFA-3 IgV

<400> 2946

Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val
1   5   10   15

Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp
            20   25   30

Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe
        35   40   45

Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr
    50   55   60

Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn
65   70   75   80

Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu
                85   90

<210> 2947
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> unmodified CTLA-4 IgV (39-140 of P16410)

<400> 2947

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85 90 95

Tyr Pro Pro Pro Tyr Tyr
            100

<210> 2948
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P/L98Q/Y105L ECD

<400> 2948

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35 40 45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2949
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L63P/L98R/N110K ECD

<400>  2949

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Arg Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Lys Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2950
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T ECD

<400> 2950

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2951
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P ECD

<400> 2951

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2952
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/L98Q/Y105L ECD

<400> 2952

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2953
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> L98Q/Y105L ECD

<400> 2953

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2954
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P ECD

<400> 2954

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2955
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L98R/N110K ECD

<400> 2955

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Arg Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Lys Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 2956
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P/L98Q/M99L/Y105L ECD

<400> 2956

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 2957
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> E33M/Q82H/L98Q/M99L/Y105L ECD

<400> 2957

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Met Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile His Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2958
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/S72G/L98Q/M99L/Y105L ECD

<400> 2958

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2959
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> S14N/R16C/I18T/M56K/T61A/L63P/A86T/M99L ECD

<400> 2959

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Asn Ser Cys
1 5 10 15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Lys Gly Asn Glu Leu Ala Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Thr Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 2960
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> S27P/M56K/L63P/S72G/S73R/T89A/M99L/Y105L/I117M ECD

<400> 2960

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Pro Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Arg Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Met Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 2961
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> M56K/L63P/N75D/V96I/M99L/Y105L/L106I ECD

<400> 2961

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asp Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Ile
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2962
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/S72G/Y105L ECD

<400> 2962

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2963
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/L98Q/M99L/Y105L/I117M ECD

<400> 2963

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Met Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 2964
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/S72G/L98Q/M99L/Y105L/L106I/I117L ECD

<400> 2964

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2965
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  A26T/L63P/S72G/L98Q/Y105L/L106I/I117L ECD

<400>  2965

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2966
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/L98Q/V116A ECD

<400> 2966

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Glu Gln Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Ala Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2967
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/L98Q/M99L/Y105L ECD

<400>  2967

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2968
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> T37S/M56V/L98Q/Y105L ECD

<400> 2968

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Ser Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Val Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2969
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/Y54F/M56K/M99L/Y105L ECD

<400> 2969

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Phe Met Lys Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2970
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/I18T/A26T/M55T/T69S/S72G/M99L/Y105L ECD

<400> 2970

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1 5 10 15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Ser Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2971
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> V22I/L63P/L98Q/Y105L/I117M ECD

<400> 2971

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

```
Gly Ile Ala Ser Phe Ile Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Met Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 2972
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/S72G/L98Q/M99L/Y105L ECD

<400> 2972

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45
```

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2973
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  E33M/A42T/L98Q/Y105L ECD

<400>  2973

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Met Val Arg Val Thr Val Leu Arg Gln Thr Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2974
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> M55T/E97Q/M99L/Y105F ECD

<400> 2974

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Gln Leu Leu Tyr Pro Pro Pro Tyr Phe Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2975
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  M55T/S72G/L98Q/M99L/Y105L ECD

<400>  2975

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2976
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> R16C/G29W/E33V/M55T/L63P/L98Q/Y105L ECD

<400> 2976

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Cys
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Val Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2977
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P/L98Q/Y105L/L106I ECD

<400> 2977

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2978
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> M56L/L63P/L98Q/Y105L/L106I/I117L ECD

<400> 2978

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Leu Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2979
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> S15P/I18V/M56T/L98Q/M99L/Y105L ECD

<400> 2979

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Pro Arg
1 5 10 15

Gly Val Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2980
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/G29W/L63P/L98Q/Y105L ECD

<400> 2980

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2981
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L63P/Q82H/L98Q/M99L/Y105L ECD

<400>  2981

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile His Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2982
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L98Q/M99L/Y105L/L106I/I117T ECD

<400> 2982

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Thr Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2983
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L98Q/M99L/Y105L/L106I/Y115N ECD

<400>  2983

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Asn Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 2984
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> M55T/L63P/T71I/M99L/Y105L ECD

<400> 2984

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Ile Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 2985
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/T53S/M56K/L63P/L98Q/Y105L ECD

<400> 2985

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2986
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/A26T/L63P/Q82R/L98Q/Y105L ECD

<400> 2986

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2987
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12H/M55T/E59D/L63P/M99L ECD

<400> 2987

Lys Ala Met His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg
1 5 10 15

```
Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Asp Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Leu Leu Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 2988
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/L63P/S72G/L98Q/Y105L/I108V ECD

<400> 2988

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45
```

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Val Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2989
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I18T/L63P/S72G/L98Q/M99L/Y105L ECD

<400>  2989

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2990
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> T61A/L63P/S72G/L98Q/M99L/Y105L ECD

<400> 2990

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Ala Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2991
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  V38I/L63P/S72G/L98Q/M99L/Y105L ECD

<400>  2991

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Ile Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2992
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/S72G/I93L/L98Q/M99L/Y105L ECD

<400> 2992

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Leu Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2993
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> L12I/M55T/M56V/I67T/M99L/L106R/I108F ECD

<400> 2993

Lys Ala Met His Val Ala Gln Pro Ala Val Val Ile Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Thr Val Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Thr Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Tyr Arg Gly Phe Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2994
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18N/A26T/L63H/T89A/L98Q/M99L/Y105L ECD

<400> 2994

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Asn Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe His Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2995
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/E48R/L63P/T69S/L98Q/Y105L/N110Y ECD

<400> 2995

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Arg
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Ser Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Tyr Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 2996
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18N/L63P/S72T/M87T/L98Q/Y105L/N110S ECD

<400> 2996

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Asn Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Thr Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Thr Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Ser Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 2997
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/M56T/L63P/L98Q/Y105L/L106I/I117L ECD

<400> 2997

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 2998
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/M87T/L98Q/M99L/Y105L ECD

<400> 2998

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Thr Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  2999
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/N58S/L63P/D64N/L98Q/M99L/Y105L ECD

<400>  2999

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asn
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3000
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/L63P/S72G/M87K/L98Q/M99L/Y105L ECD

<400> 3000

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Lys Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3001
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> M56V ECD

<400> 3001

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Val Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3002
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/K95R ECD

<400> 3002

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Arg Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3003
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/L98Q ECD

<400> 3003

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3004
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L98Q/M99L/Y105L ECD

<400> 3004

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3005
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/M87K/M99L/L106R ECD

<400> 3005

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Lys Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Tyr Arg Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3006
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/M99L/Y105L/I108F ECD

<400> 3006

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Phe Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3007
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  V10A/L63P/L98Q/Y105L ECD

<400>  3007

Lys Ala Met His Val Ala Gln Pro Ala Ala Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3008
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> M56T/L91R/L98Q/Y105L ECD

<400> 3008

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Arg Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3009
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/M87V/N110K/I117E ECD

<400> 3009

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Lys Gly Thr
100 105 110

Gln Ile Tyr Val Glu Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3010
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/L98Q/M99L/Y105L ECD

<400> 3010

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3011
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/V46E/L63P/D65G/L98Q ECD

<400> 3011

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Glu Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Gly Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3012
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/L98Q/Y105L ECD

<400> 3012

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3013
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/E59G/L63P/L98Q/Y105L ECD

<400>  3013

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Gly Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3014
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12H/L63P/S72G/L98Q/Y105L ECD

<400> 3014

Lys Ala Met His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3015
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  A6T/A26T/M55T/M99L/Y105L ECD

<400>  3015

Lys Ala Met His Val Thr Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3016
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/D65G/L98Q/M99L/Y105L ECD

<400> 3016

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Gly Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3017
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> V10A/L63P/D64V/S72G/L98Q/M99L/Y105L ECD

<400> 3017

Lys Ala Met His Val Ala Gln Pro Ala Ala Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Val
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3018
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/G29W/D43N/N58S/L63P/L98Q/M99L/Y105L ECD

<400> 3018

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asn Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3019
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18V/A26T/L63P/D64E/L98Q/Y105L/L106R/N110K ECD

<400> 3019

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Val Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Glu
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Arg Gly Ile Gly Lys Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3020
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A19V/G29W/R35K/L63P/L98Q/M99L/Y105L ECD

<400> 3020

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Val Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Lys Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3021
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P/S72G/T89M/L98Q/M99L/Y105L ECD

<400> 3021

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

```
Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Met Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3022
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  P28L/E33V/L63P/S72G/L98R/M99L/Y105L ECD

<400>  3022

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Leu Gly Lys Ala Thr
            20                  25                  30


Val Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

```
Glu Arg Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3023
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  E24Q/L63P/S72G/L98Q/M99L/Y105L ECD

<400>  3023

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Gln Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3024
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/G29R/L63P/S72G/L98Q/M99L/Y105L ECD

<400> 3024

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Arg Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3025
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/L98Q/M99L/Y105L ECD

<400> 3025

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3026
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Q41L/Y54F/M56K/M99L/I108F ECD

<400> 3026

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Leu Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Phe Met Lys Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Tyr Leu Gly Phe Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3027
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> S72G/L98Q/M99L/Y105L/I117T ECD

<400> 3027

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

```
Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Thr Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3028
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> M56R/L63P/L98Q/M99L/Y105L ECD

<400> 3028

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45
```

```
Val Cys Ala Ala Thr Tyr Met Arg Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3029
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  E33M/L63P/S72G/L98Q/Y105L ECD

<400>  3029

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Met Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3030
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/L98Q/M99L/Y105L/L106I ECD

<400> 3030

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

```
Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3031
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  A26T/M55R/L98Q/M99L/Y105L ECD

<400>  3031

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Arg Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110
```

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3032
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/S72G/M87A/L98Q/Y105L ECD

<400> 3032

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Ala Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3033
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> A26D/S72G/L98Q/M99L/Y105L ECD

<400> 3033

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Asp Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3034
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> V22A/L63P/L98Q/M99L/Y105L/P119H ECD

<400> 3034

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Ala Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp His Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3035
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/M55T/L63P/L98Q/M99L/Y105L ECD

<400> 3035

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3036
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> E33V/A42S/M55T/L98Q/M99L/Y105L ECD

<400> 3036

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Val Val Arg Val Thr Val Leu Arg Gln Ser Asp Ser Gln Val Thr Glu
35 40 45

```
Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3037
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/Q82R/L98Q/Y105L ECD

<400> 3037

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60
```

```
Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3038
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  E33M/L63P/S72G/L98Q/Y105L/I117L ECD

<400>  3038

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Met Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3039
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/I67N/S72G/L98Q/M99L/Y105L ECD

<400> 3039

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Asn Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3040
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12F/A26T/L63P/L98Q/Y105L/L106R ECD

<400> 3040

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Arg Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3041
<211> 126

<212> PRT
<213> Artificial Sequence

<220>
<223> S20N/A26T/L63P/L98Q/M99L/Y105L ECD

<400> 3041

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Asn Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3042
<211> 237
<212> PRT
<213> Artificial Sequence

<220>
<223> Green fluorescent protein

<400> 3042

```
Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu
1               5                  10                  15

Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly
            20                  25                  30

Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr
        35                  40                  45

Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe Ser
    50                  55                  60

Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln His
65                  70                  75                  80

Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr
                85                  90                  95

Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys
            100                 105                 110

Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp
        115                 120                 125

Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr
    130                 135                 140

Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile
145                 150                 155                 160

Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val Gln
                165                 170                 175

Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val
            180                 185                 190
```

```
Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys
        195                 200                 205


Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val Thr
    210                 215                 220


Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
225                 230                 235


<210>  3043
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/T61I/L63P/S72G/L98Q/M99L/Y105L ECD

<400>  3043

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Ile Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3044
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/T69I/L98Q/M99L/Y105L ECD

<400> 3044

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Ile Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3045
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/L63P/S72G/L98Q/M99L/Y105L/L106N ECD

<400> 3045

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Asn Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3046
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/T69A/L98Q/M99L/Y105L/L106R/V116A ECD

<400> 3046

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Ala Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Arg Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Ala Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3047
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/S72G/L98Q/Y105L ECD

<400> 3047

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3048
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/D65G/S72G/L98Q/Y105L ECD

<400> 3048

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

```
Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Gly Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3049
<211>  237
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  enhanced green fluorescent protein (eEGFP)

<400>  3049

Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu
1               5                   10                  15


Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly
            20                  25                  30


Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr
        35                  40                  45
```

```
Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu Thr
    50                  55                  60

Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln His
65                  70                  75                  80

Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr
                85                  90                  95

Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys
            100                 105                 110

Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp
        115                 120                 125

Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr
    130                 135                 140

Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile
145                 150                 155                 160

Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val Gln
                165                 170                 175

Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val
            180                 185                 190

Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys
        195                 200                 205

Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val Thr
    210                 215                 220

Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
225                 230                 235
```

<210> 3050
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> T53S/M56V/L98Q/Y105L ECD

<400> 3050

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Ser Tyr Met Val Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3051
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> L63P/S72G/L98Q/Y105L ECD

<400> 3051

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3052
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18A/L63P/S72G/L98Q/Y105L ECD

<400> 3052

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

```
Gly Ala Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3053
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/L63P/L98Q/Y105L ECD

<400> 3053

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30
```

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3054
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18V/G29W/L63P/S72G/L98Q/Y105L ECD

<400> 3054

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Val Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

```
Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3055
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/L63P/S72G/L98Q/Y105L/L106I ECD

<400>  3055

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3056
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/I67V/S72G/L98Q/Y105L ECD

<400> 3056

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Val Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3057
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/M55V/E59G/L63P/L98Q/Y105L ECD

<400> 3057

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Val Met Gly Asn Gly Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3058
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/S72G/L98Q/Y105L/I117L ECD

<400> 3058

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3059
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> L63P/S72G/L98Q/Y105L/L106I/I117L ECD

<400> 3059

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3060
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12F/R16H/G29W/M56T/L98Q/Y105L ECD

<400> 3060

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1   5   10   15

```
Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3061
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/G29W/L63P/S72G/L98Q/Y105L ECD

<400> 3061

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30
```

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3062
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/G29W/L63P/S72G/L98Q/Y105L/L106I ECD

<400> 3062

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3063
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/S72G/L98Q/Y105L/L106I/I117L ECD

<400> 3063

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3064
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/S72G/L98Q/Y105L/L106I ECD

<400> 3064

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3065
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/T53S/L63P/L98Q/Y105L/L106I/I117L ECD

<400> 3065

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3066
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/S72G/M87V/L98Q/Y105L ECD

<400> 3066

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3067
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> G29W/S72G/Q76R/L98Q/Y105L/L106I/Q113H ECD

<400> 3067

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Arg Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

His Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3068
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/S72G/L98Q/Y105L/L106V ECD

<400> 3068

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

```
Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Val Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3069
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/L98Q/M99L/Y105L ECD

<400> 3069

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30
```

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3070
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58D/I67V/L98Q/M99L/Y105L ECD

<400> 3070

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asp Glu Leu Thr Phe Leu Asp
    50   55   60

```
Asp Ser Val Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3071
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I67V/S72G/Q82H/T89A/L98Q/M99L/Y105L ECD

<400>  3071

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Val Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

Ile His Gly Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3072
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> S72G/R85G/L98Q/M99L/Y105L/L106I ECD

<400> 3072

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Gly Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3073
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/T47A/M56K/L63P/S72G/Q82R/L98Q/M99L/Y105L ECD

<400> 3073

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Ala Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3074
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/M55T/L63P/S72G/L98Q/M99L/Y105L ECD

<400> 3074

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3075
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> L12H/I18V/A42T/M55T/N58D/L98R/Y105L/L106I/P121S ECD

<400> 3075

Lys Ala Met His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg
1 5 10 15

Gly Val Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Thr Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Thr Met Gly Asp Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Arg Met Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Ser Cys Pro Asp Ser Asp
115 120 125

<210> 3076
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/A26T/L63P/S72G/L98Q/Y105L ECD

<400> 3076

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

```
Gly Thr Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3077
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12F/K30R/S72G/Q82R/L98Q/M99L/Y105L ECD

<400> 3077

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Arg Ala Thr
            20                  25                  30
```

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3078
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/L63P/S72G/L98Q/M99L/Y105L/L106N/I117L ECD

<400> 3078

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

```
Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Asn Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3079
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/M87K/I93V/L98Q/M99L/Y105L ECD

<400>  3079

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

Ile Gln Gly Leu Arg Ala Lys Asp Thr Gly Leu Tyr Val Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3080
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> P28L/E33V/L63P/S72G/L98Q/M99L/Y105L ECD

<400> 3080

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Leu Gly Lys Ala Thr
20 25 30

Val Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3081
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/L63P/Q82H/L98Q/M99I/Y105L ECD

<400> 3081

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile His Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Ile Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3082
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18F/L63P/L98Q/M99L/Y105L/P121S ECD

<400> 3082

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Phe Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Ser Cys Pro Asp Ser Asp
115 120 125

<210> 3083
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> L63P/L98Q/M99L/Y105L/I108V ECD

<400> 3083

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Val Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3084
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/A42V/Q45H/I67N/M87K/E97Q/M99L ECD

<400> 3084

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

```
Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Val Asp Ser His Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Asn Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Lys Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Gln Leu Leu Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3085
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> M56V/E59G/L63P/S72G/M87K/I93V/L98Q/M99L/Y105L/I117E ECD

<400> 3085

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30
```

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Val Gly Asn Gly Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Lys Asp Thr Gly Leu Tyr Val Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Glu Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3086
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/M87K/T89S/L98Q/M99L/Y105L/I108V/I117L ECD

<400> 3086

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

```
Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Lys Asp Ser Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Val Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3087
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12P/M56V/L63P/V96I/L98Q/M99L/Y105L/Y115H ECD

<400>  3087

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Val Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Ile
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile His Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3088
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/T61N/L63P/L98Q/Y105L ECD

<400> 3088

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Ser Tyr Met Lys Gly Asn Glu Leu Asn Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3089
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/A26S/M55T/M56V/L63P/S72G/L98Q/M99L/Y105L/I117K ECD

<400> 3089

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ser Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Thr Val Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Lys Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3090
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/T61R/L63P/S72G/L98Q/M99L/Y105L ECD

<400> 3090

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Arg Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3091
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> L12P/L63P/S72G/L98Q/M99L/Y105L ECD

<400> 3091

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3092
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> E33M/L63P/S72G/L98Q/Y105L/I108F ECD

<400> 3092

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

```
Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Met Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Phe Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3093
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12P/R16H/A26T/T61S/L63P/M87V/L98Q/M99L/Y105L/L106I/I117L ECD

<400>  3093

Lys Ala Met His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser His
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30
```

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Ser Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Leu Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3094
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/N58S/L63P/M87V/L98Q/Y105L/P121S ECD

<400> 3094

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
    50   55   60

```
Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Ser Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3095
<211>  126
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/L63P/S72G/L98Q/Y105L/P121S ECD

<400>  3095

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Ser Cys Pro Asp Ser Asp
115 120 125

<210> 3096
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/N58S/L63P/M87V/L98Q/Y105L ECD

<400> 3096

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3097
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/N58S/L63P/M87V/L98Q/Y105L/I108V ECD

<400> 3097

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Val Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3098
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/L63P/S72G/L98Q/Y105L ECD

<400> 3098

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3099
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> V10A/G29W/T53S/M56K/L63P/L98Q/Y105L/P121S ECD

<400> 3099

Lys Ala Met His Val Ala Gln Pro Ala Ala Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Ser Cys Pro Asp Ser Asp
115 120 125

<210> 3100
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P/L98Q/Y105L IgV

<400> 3100

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3101
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L63P/L98R IgV domain (of L63P/L98R/N110K - IgV doesn't contain
       N110 residue)

<400>  3101

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Arg Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3102
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12P/A26T IgV domain

<400>  3102

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
```

85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3103
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P IgV domain

<400> 3103

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3104
<211> 102
<212> PRT

<213> Artificial Sequence

<220>
<223> L63P/L98Q/Y105L IgV domain

<400> 3104

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3105
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L98Q/Y105L IgV domain

<400> 3105

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3106
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L63P IgV domain

<400>  3106

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
```

50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3107
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L98R IgV domain (of L98R/N110K - IgV doesn't contain N110 residue)

<400> 3107

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Arg Met
85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3108
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P/L98Q/M99L/Y105L IgV domain

<400> 3108

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3109
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> E33M/Q82H/L98Q/M99L/Y105L IgV domain

<400> 3109

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Met Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile His Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3110
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3110

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3111
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> S14N/R16C/I18T/M56K/T61A/L63P/A86T/M99L IgV domain

<400> 3111

```
His Val Ala Gln Pro Ala Val Val Leu Ala Asn Ser Cys Gly Thr Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Lys Gly Asn Glu Leu Ala Phe Pro Asp Asp Ser Ile
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Thr Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3112
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  S27P/M56K/L63P/S72G/S73R/T89A/M99L/Y105L IgV domain

<400>  3112

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Pro Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Arg Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3113
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> M56K/L63P/N75D/V96I/M99L/Y105L IgV domain

<400> 3113

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asp Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Ile Glu Leu Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3114
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> L63P/S72G/Y105L IgV domain

<400> 3114

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3115
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/S72G/L98Q/Y105L IgV domain

<400> 3115

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30
```

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3116
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/L98Q/M99L/Y105L IgV domain

<400>  3116

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3117
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  T37S/M56V/L98Q/Y105L IgV domain

<400>  3117

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Ser Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Val Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3118
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/Y54F/M56K/M99L/Y105L IgV domain

<400> 3118

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Phe Met Lys Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3119
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/I18T/A26T/M55T/T69S/S72G/M99L/Y105L IgV domain

<400> 3119

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Thr Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Ser Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3120
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> V22I/L63P/L98Q/Y105L IgV domain

<400> 3120

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Ile Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3121
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3121

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

```
Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3122
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  E33M/A42T/L98Q/Y105L IgV domain

<400>  3122

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Met Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Thr Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3123
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> M55T/E97Q/M99L/Y105F IgV domain

<400> 3123

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Gln Leu Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Phe
            100
```

<210> 3124
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> M55T/S72G/L98Q/M99L/Y105L IgV domain

<400> 3124

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3125
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  R16C/G29W/E33V/M55T/L63P/L98Q/Y105L IgV domain

<400>  3125

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Cys Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Val Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3126
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  M56L/L63P/L98Q/Y105L IgV domain

<400>  3126

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Leu Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3127
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> S15P/I18V/M56T/L98Q/M99L/Y105L IgV domain

<400> 3127

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Pro Arg Gly Val Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3128
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/G29W/L63P/L98Q/Y105L IgV domain

<400> 3128

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3129
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/Q82H/L98Q/M99L/Y105L IgV domain

<400> 3129

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15
```

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile His Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3130
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  M55T/L63P/T71I/M99L/Y105L IgV domain

<400>  3130

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Ile Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3131
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/T53S/M56K/L63P/L98Q/Y105L IgV domain

<400> 3131

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3132
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/A26T/L63P/Q82R/L98Q/Y105L IgV domain

<400> 3132

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Arg Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3133
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12H/M55T/E59D/L63P/M99L IgV domain

<400> 3133

His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Thr Met Gly Asn Asp Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85   90   95

Tyr Pro Pro Pro Tyr Tyr
            100

<210> 3134
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/L63P/S72G/L98Q/Y105L IgV domain

<400> 3134

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3135
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3135

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

```
Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3136
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  T61A/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400>  3136

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Ala Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3137
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> V38I/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3137

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Ile Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3138
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> L63P/S72G/I93L/L98Q/M99L/Y105L IgV domain

<400> 3138

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Leu Cys Lys Val Glu Gln Leu
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3139
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12I/M55T/M56V/I67T/M99L IgV domain

<400> 3139

His Val Ala Gln Pro Ala Val Val Ile Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Thr Val Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Thr
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3140
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I18N/A26T/L63H/T89A/L98Q/M99L/Y105L IgV domain

<400>  3140

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Asn Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe His Asp Asp Ser Ile
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3141
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I18T/E48R/L63P/T69S/L98Q/Y105L IgV domain

<400>  3141

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Arg Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Ser Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3142
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18N/L63P/S72T/M87T/L98Q/Y105L IgV domain

<400> 3142

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Asn Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Thr Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Thr Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3143
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/M56T/L63P/L98Q/Y105L IgV domain

<400> 3143

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3144
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/M87T/L98Q/M99L/Y105L IgV domain

<400> 3144

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Thr Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3145
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/D64N/L98Q/M99L/Y105L IgV domain

<400> 3145

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asn Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

```
Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3146
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I18T/L63P/S72G/M87K/L98Q/M99L/Y105L IgV domain

<400>  3146

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Lys Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3147
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> M56V IgV domain

<400> 3147

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Val Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100
```

<210> 3148
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/K95R IgV domain

<400> 3148

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Arg Val Glu Leu Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3149
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L63P/L98Q IgV domain

<400>  3149

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3150
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L98Q/M99L/Y105L IgV domain

<400>  3150

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3151
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/M87K/M99L IgV domain

<400> 3151

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Lys Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3152
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/M99L/Y105L IgV domain

<400> 3152

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3153
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> V10A/L63P/L98Q/Y105L IgV domain

<400> 3153

His Val Ala Gln Pro Ala Ala Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3154
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  M56T/L91R/L98Q/Y105L IgV domain

<400>  3154

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Arg Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3155
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/M87V IgV domain

<400> 3155

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3156
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/L98Q/M99L/Y105L IgV domain

<400> 3156

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3157
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/V46E/L63P/D65G/L98Q IgV domain

<400> 3157

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Glu Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Gly Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100
```

<210> 3158
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/L98Q/Y105L IgV domain

<400> 3158

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15
```

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3159
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/E59G/L63P/L98Q/Y105L IgV domain

<400>  3159

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Gly Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3160
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12H/L63P/S72G/L98Q/Y105L IgV domain

<400>  3160

His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3161
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A6T/A26T/M55T/M99L/Y105L IgV domain

<400> 3161

His Val Thr Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3162
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> A26T/L63P/D65G/L98Q/M99L/Y105L IgV domain

<400> 3162

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Gly Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3163
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> V10A/L63P/D64V/S72G/L98Q/M99L/Y105L IgV domain

<400> 3163

His Val Ala Gln Pro Ala Ala Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Val Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3164
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/G29W/D43N/N58S/L63P/L98Q/M99L/Y105L IgV domain

<400> 3164

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asn Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3165
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18V/A26T/L63P/D64E/L98Q/Y105L IgV domain

<400> 3165

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Val Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Glu Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3166
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A19V/G29W/R35K/L63P/L98Q/M99L/Y105L IgV domain

<400> 3166

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Val
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Lys
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3167
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/A26T/L63P/S72G/T89M/L98Q/M99L/Y105L IgV domain

<400> 3167

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Met Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3168
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> P28L/E33V/L63P/S72G/L98R/M99L/Y105L IgV domain

<400> 3168

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Leu Gly Lys Ala Thr Val Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Arg Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3169
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> E24Q/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3169

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Gln Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

```
Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3170
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I18T/G29R/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400>  3170

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Arg Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3171
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/L98Q/M99L/Y105L IgV domain

<400> 3171

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3172
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> Q41L/Y54F/M56K/M99L IgV domain

<400> 3172

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Leu Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Phe Met Lys Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3173
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  S72G/L98Q/M99L/Y105L IgV domain

<400>  3173

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3174
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  M56R/L63P/L98Q/M99L/Y105L IgV domain

<400>  3174

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Arg Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3175
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> E33M/L63P/S72G/L98Q/Y105L IgV domain

<400> 3175

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Met Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3176
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/M55R/L98Q/M99L/Y105L IgV domain

<400> 3176

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Arg Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3177
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/S72G/M87A/L98Q/Y105L IgV domain

<400> 3177

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Ala Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100


<210>  3178
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  A26D/S72G/L98Q/M99L/Y105L IgV domain

<400>  3178

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Asp Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3179
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> V22A/L63P/L98Q/M99L/Y105L IgV domain

<400> 3179

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15

Ser Phe Ala Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3180
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/M55T/L63P/L98Q/M99L/Y105L IgV domain

<400> 3180

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3181
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> E33V/A42S/M55T/L98Q/M99L/Y105L IgV domain

<400> 3181

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Val Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ser Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3182
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/Q82R/L98Q/Y105L IgV domain

<400> 3182

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Arg Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3183
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/I67N/S72G/L98Q/M99L/Y105L IgV domain

<400> 3183

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Asn
    50   55   60

```
Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3184
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12F/A26T/L63P/L98Q/Y105L IgV domain

<400>  3184

His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3185
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> S20N/A26T/L63P/L98Q/M99L/Y105L IgV domain

<400> 3185

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Asn Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3186
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> G29W/M87K/T89S/L98Q/M99L/Y105L IgV domain

<400> 3186

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Lys Asp Ser Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3187
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T61I/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3187

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Ile Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3188
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/N58S/L63P/T69I/L98Q/M99L/Y105L IgV domain

<400>  3188

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60
```

Cys Ile Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3189
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3189

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3190
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L63P/T69A/L98Q/M99L/Y105L IgV domain

<400> 3190

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Ala Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3191
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/S72G/L98Q/Y105L IgV domain

<400> 3191

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3192
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/D65G/S72G/L98Q/Y105L IgV domain

<400> 3192

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Gly Ser Ile
    50                  55                  60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3193
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> T53S/M56V/L98Q/Y105L IgV domain

<400> 3193

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Ser Tyr Met Val Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

```
Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3194
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L63P/S72G/L98Q/Y105L IgV domain

<400>  3194

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3195
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18A/L63P/S72G/L98Q/Y105L IgV domain

<400> 3195

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ala Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3196
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/L63P/L98Q/Y105L IgV domain

<400> 3196

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3197
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I18V/G29W/L63P/S72G/L98Q/Y105L IgV domain

<400>  3197

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Val Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3198
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/S72G/L98Q/Y105L IgV domain

<400> 3198

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3199
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/L63P/I67V/S72G/L98Q/Y105L IgV domain

<400> 3199

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Val
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3200
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/M55V/E59G/L63P/L98Q/Y105L IgV domain

<400> 3200

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Val Met Gly Asn Gly Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3201
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12F/R16H/G29W/M56T/L98Q/Y105L IgV domain

<400> 3201

His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3202
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12P/G29W/L63P/S72G/L98Q/Y105L IgV domain

<400>  3202

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3203
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/T53S/L63P/L98Q/Y105L IgV domain

<400> 3203

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3204
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/N58S/L63P/S72G/M87V/L98Q/Y105L IgV domain

<400> 3204

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3205
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/S72G/Q76R/L98Q/Y105L IgV domain

<400> 3205

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Gly Ser Gly Asn Arg Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3206
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/L63P/L98Q/M99L/Y105L IgV domain

<400> 3206

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

```
Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3207
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/N58D/I67V/L98Q/M99L/Y105L IgV domain

<400>  3207

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asp Glu Leu Thr Phe Leu Asp Asp Ser Val
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3208
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I67V/S72G/Q82H/T89A/L98Q/M99L/Y105L IgV domain

<400>  3208

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Val
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile His Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3209
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> S72G/R85G/L98Q/M99L/Y105L IgV domain

<400> 3209

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Gly Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3210
<211> 102
<212> PRT
<213> Artificial Sequence

<220>

<223> A26T/T47A/M56K/L63P/S72G/Q82R/L98Q/M99L/Y105L IgV domain

<400> 3210

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Ala Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Arg Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3211
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/M55T/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3211

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Thr Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3212
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12H/I18V/A42T/M55T/N58D/L98R/Y105L IgV domain

<400>  3212

His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg Gly Val Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Thr Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Thr Met Gly Asp Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60
```

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Arg Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3213
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/A26T/L63P/S72G/L98Q/Y105L IgV domain

<400> 3213

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3214
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12F/K30R/S72G/Q82R/L98Q/M99L/Y105L IgV domain

<400> 3214

```
His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Arg Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Arg Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3215
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/M87K/I93V/L98Q/M99L/Y105L IgV domain

<400> 3215

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Lys Asp Thr Gly Leu Tyr Val Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3216
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> P28L/E33V/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3216

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Leu Gly Lys Ala Thr Val Val Arg
20 25 30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3217
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/T53S/M56K/L63P/Q82H/L98Q/M99I/Y105L IgV domain

<400>  3217

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile His Gly
65                  70                  75                  80
```

```
Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Ile
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3218
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  I18F/L63P/L98Q/M99L/Y105L IgV domain

<400>  3218

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Phe Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3219
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> A26T/A42V/Q45H/I67N/M87K/E97Q/M99L IgV domain

<400> 3219

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Val Asp Ser His Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Asn
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Lys Asp Thr Gly Leu Tyr Ile Cys Lys Val Gln Leu Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100
```

<210> 3220
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> M56V/E59G/L63P/S72G/M87K/I93V/L98Q/M99L/Y105L IgV domain

<400> 3220

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Val Gly Asn Gly Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Lys Asp Thr Gly Leu Tyr Val Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3221
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12P/M56V/L63P/V96I/L98Q/M99L/Y105L IgV domain

<400>  3221

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Val Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Ile Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3222
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  G29W/T53S/M56K/T61N/L63P/L98Q/Y105L IgV domain

<400>  3222

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Asn Glu Leu Asn Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3223
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/A26S/M55T/M56V/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3223

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ser Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Thr Val Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3224
<211> 102

<212> PRT
<213> Artificial Sequence

<220>
<223> I18T/T61R/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3224

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Arg Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3225
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> L12P/L63P/S72G/L98Q/M99L/Y105L IgV domain

<400> 3225

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3226
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  L12P/R16H/A26T/T61S/L63P/M87V/L98Q/M99L/Y105L IgV domain

<400>  3226

His Val Ala Gln Pro Ala Val Val Pro Ala Ser Ser His Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

Ala Thr Tyr Met Met Gly Asn Glu Leu Ser Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3227
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/M56K/N58S/L63P/M87V/L98Q/Y105L IgV domain

<400> 3227

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3228
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> G29W/T53S/L63P/S72G/L98Q/Y105L IgV domain

<400> 3228

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3229
<211> 102
<212> PRT
<213> Artificial Sequence

<220>
<223> V10A/G29W/T53S/M56K/L63P/L98Q/Y105L IgV domain

<400> 3229

His Val Ala Gln Pro Ala Ala Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3230
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 ECD

<400> 3230

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3231
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 ECD

<400> 3231

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Glu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp
        115                 120                 125


<210>  3232
<211>  102
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CTLA-4 IgV

<400>  3232

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Tyr Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3233
<211>  111
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD8B IgV

<400>  3233

Leu Gln Gln Thr Pro Ala Tyr Ile Lys Val Gln Thr Asn Lys Met Val
1               5                   10                  15


Met Leu Ser Cys Glu Ala Lys Ile Ser Leu Ser Asn Met Arg Ile Tyr
            20                  25                  30


Trp Leu Arg Gln Arg Gln Ala Pro Ser Ser Asp Ser His His Glu Phe
        35                  40                  45


Leu Ala Leu Trp Asp Ser Ala Lys Gly Thr Ile His Gly Glu Glu Val
    50                  55                  60


Glu Gln Glu Lys Ile Ala Val Phe Arg Asp Ala Ser Arg Phe Ile Leu
65                  70                  75                  80


Asn Leu Thr Ser Val Lys Pro Glu Asp Ser Gly Ile Tyr Phe Cys Met
                85                  90                  95
```

Ile Val Gly Ser Pro Glu Leu Thr Phe Gly Lys Gly Thr Gln Leu
100 105 110

<210> 3234
<211> 2580
<212> DNA
<213> Artificial Sequence

<220>
<223> Anti-CD3 - PD-L1 303 - PD-L1 303 - PD-L1 303 - Fc

<400> 3234
caggtccagc tgcagcagtc tggggctgaa ctggcaagac ctggggcctc agtgaagatg 60

tcctgcaagg cttctggcta cacctttact aggtacacga tgcactgggt aaaacagagg 120

cctggacagg gtctggaatg gattggatac attaatccta gccgtggtta tactaattac 180

aatcagaagt tcaaggacaa ggccacattg actacagaca aatcctccag cacagcctac 240

atgcaactga gcagcctgac atctgaggac tctgcagtct attactgtgc aagatattat 300

gatgatcatt actgccttga ctactggggc caaggcacca cggtgaccgt gagcgccggg 360

ggaggtggca gcgggggagg tggcagcggc ggcgggagct cccaaattgt tctcacccag 420

tctccagcaa tcatgtctgc atctccaggg gagaaggtca ccatgacctg cagtgccagc 480

tcaagtgtaa gttacatgaa ctggtaccag cagaagtcag gcacctcccc caaaagatgg 540

atttatgaca catccaaact ggcttctgga gtccctgctc acttcagggg cagtgggtct 600

gggacctctt actctctcac aatcagcggc atggaggctg aagatgctgc cacttattac 660

tgccagcagt ggagtagtaa cccattcacg ttcggctcgg ggacaaagtt ggaaataaac 720

cggggcggtg gcgatcccgg tggaggaggg tcaagcgctt ttacagtaac cgtaccgaag 780

gacctttacg tcgttgagta tggatctaat atgactattg agtgtaaatt tcccgttgag 840

aaacagcttg acctggcggc gctcatcgtg tattgggaaa tggaagggaa agacattata 900

caattcgttc atggagagga agatcagaaa gcccaacact cttcttatcg acaaagggca 960

cggttgctga aagatcaatt gtcattggga aacgctgcat tgcaaattac tgacgtgaag 1020

ctccaggacg caggtgtata caggtgcatg attagttacg gtggaggagc ggactataag 1080

cggataaccg taaaggttaa cgcaggtggt ggagggtcag gcggaggagg atcttttacg 1140

gttacagtcc cgaaagacct ctatgtcgtc gaatacggat caaatatgac gatcgagtgc 1200

aaatttcctg tcgagaaaca gctggacctt gcggctttga tagtatactg ggagatggaa 1260

ggaaaggaca ttatccaatt cgtgcacggc gaagaggacc agaaggcgca acattcttca 1320

tacaggcagc gggctaggct tctcaaagat caattgagtc tcggcaacgc agcactgcaa 1380

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ggagggagtt ttacagttac ggtcccaaag gatctttatg tggttgaata tggttcaaac 1560

atgaccatcg agtgtaagtt cccggtcgag aagcaactcg acttggctgc gttgattgta 1620

tactgggaga tggagggaaa ggacattatt cagtttgtcc atggggagga agatcaaaaa 1680

gctcagcaca gctcatatcg gcagcgggcc cgactgttga aagaccagtt gagtttgggg 1740

aacgcggctc ttcagataac tgatgttaag cttcaggacg caggagtgta taggtgcatg 1800

ataagttatg gcgggggagc cgattataaa cggataaccg taaaagttaa tgctggcggc 1860

ggaggttcag gcggaggtgg cagcgagccc aaaagctccg acaagactca cacatgcccc 1920

ccttgtccag cgcctgaagc tgagggtgcg ccctctgtct tccttttccc ccctaagccg 1980

aaagataccc tgatgatctc ccgcactccc gaagtcacat gtgttgttgt cgacgtatct 2040

catgaagatc ctgaggtgaa attcaactgg tatgtagacg gggtcgaagt tcataatgct 2100

aagactaagc cacgagaaga gcaatacaac tcaacgtatc gggtggtgag cgttctgacg 2160

gttctgcacc aagattggct taatggaaaa gagtataagt gcaaggtgtc caacaaggct 2220

cttccggcac ccatcgaaaa gacgatttcc aaagcgaaag gccaacctag ggaaccgcaa 2280

gtttacactt tgcccccgtc aagagacgaa cttaccaaga atcaagtttc cctgacgtgc 2340

cttgtgaagg gcttctaccc tagcgatata gcagttgagt gggaatctaa cggccagccc 2400

gaaaataatt ataagactac tccgcccgtg ctggacagtg atggttcatt tttcctgtat 2460

tcaaaactca ctgtggacaa atctagatgg cagcagggta atgtgttctc ttgttcagtt 2520

atgcacgagg cattgcacaa tcactatacg caaaaaagtt tgtctctctc tccggggaag 2580

<210> 3235
<211> 2205
<212> DNA
<213> Artificial Sequence

<220>
<223> IL16 - PD-L1 303 - PD-L1 303 - PD-L1 303 - Fc

<400> 3235
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gtttgtactg tcacccttga gaaaatgagc gcgggtttgg ggttttcact cgagggcggc 120

aaagggtcac ttcacggcga caaaccattg acaatcaatc ggatatttaa aggtgctgcc 180

tctgaacaga gcgaaactgt tcaaccgggc gatgaaatac tgcaactggg tggtacagcc 240

atgcagggcc tgacgcgctt cgaggcgtgg aacattataa aagcactgcc tgatggtcca 300

gtcacaatag tcatccgccg gaaatcactt caatcaaagg agaccaccgc tgcgggagac 360

agcggtggag gagggtcaag cgcttttaca gtaaccgtac cgaaggacct ttacgtcgtt 420

gagtatggat ctaatatgac tattgagtgt aaatttcccg ttgagaaaca gcttgacctg 480

gcggcgctca tcgtgtattg ggaaatggaa gggaaagaca ttatacaatt cgttcatgga 540

gaggaagatc agaaagccca acactcttct tatcgacaaa gggcacggtt gctgaaagat 600

caattgtcat tgggaaacgc tgcattgcaa attactgacg tgaagctcca ggacgcaggt 660

gtatacaggt gcatgattag ttacggtgga ggagcggact ataagcggat aaccgtaaag 720

gttaacgcag gtggtggagg gtcaggcgga ggaggatctt ttacggttac agtcccgaaa 780

gacctctatg tcgtcgaata cggatcaaat atgacgatcg agtgcaaatt tcctgtcgag 840

aaacagctgg accttgcggc tttgatagta tactgggaga tggaaggaaa ggacattatc 900

caattcgtgc acggcgaaga ggaccagaag gcgcaacatt cttcatacag gcagcgggct 960

aggcttctca aagatcaatt gagtctcggc aacgcagcac tgcaaattac cgatgtcaag 1020

ttgcaggacg ctggcgtcta tcgctgcatg ataagctatg gcggtggtgc ggactataaa 1080

cgaattacgg tgaaggtgaa tgcaggtggc ggcgggagcg gcggtggagg gagttttaca 1140

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aagttcccgg tcgagaagca actcgacttg gctgcgttga ttgtatactg ggagatggag 1260

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<210> 3236
<211> 2223
<212> DNA
<213> Artificial Sequence

<220>
<223> CTLA-4 2519 - PD-L1 303 - PD-L1 303 - PD-L1 303 - Fc

<400> 3236

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<210> 3237
<211> 250
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> LFA-3

<400> 3237

Met Val Ala Gly Ser Asp Ala Gly Arg Ala Leu Gly Val Leu Ser Val
1 5 10 15

Val Cys Leu Leu His Cys Phe Gly Phe Ile Ser Cys Phe Ser Gln Gln
20 25 30

```
Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val Pro Ser Asn
        35                  40                  45

Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp Lys Val Ala
    50                  55                  60

Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe Lys Asn Arg
65                  70                  75                  80

Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr Asn Leu Thr
                85                  90                  95

Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn Ile Thr Asp
            100                 105                 110

Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Leu Pro Ser Pro Thr
        115                 120                 125

Leu Thr Cys Ala Leu Thr Asn Gly Ser Ile Glu Val Gln Cys Met Ile
    130                 135                 140

Pro Glu His Tyr Asn Ser His Arg Gly Leu Ile Met Tyr Ser Trp Asp
145                 150                 155                 160

Cys Pro Met Glu Gln Cys Lys Arg Asn Ser Thr Ser Ile Tyr Phe Lys
                165                 170                 175

Met Glu Asn Asp Leu Pro Gln Lys Ile Gln Cys Thr Leu Ser Asn Pro
            180                 185                 190

Leu Phe Asn Thr Thr Ser Ser Ile Ile Leu Thr Thr Cys Ile Pro Ser
        195                 200                 205

Ser Gly His Ser Arg His Arg Tyr Ala Leu Ile Pro Ile Pro Leu Ala
    210                 215                 220
```

```
Val Ile Thr Thr Cys Ile Val Leu Tyr Met Asn Gly Ile Leu Lys Cys
225                 230                 235                 240


Asp Arg Lys Pro Asp Arg Thr Asn Ser Asn
                245                 250


<210>  3238
<211>  222
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature LFA-3

<400>  3238

Phe Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His
1               5                   10                  15


Val Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys
            20                  25                  30


Asp Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser
        35                  40                  45


Phe Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile
    50                  55                  60


Tyr Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro
65                  70                  75                  80


Asn Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Leu
                85                  90                  95


Pro Ser Pro Thr Leu Thr Cys Ala Leu Thr Asn Gly Ser Ile Glu Val
            100                 105                 110
```

```
Gln Cys Met Ile Pro Glu His Tyr Asn Ser His Arg Gly Leu Ile Met
        115                 120                 125


Tyr Ser Trp Asp Cys Pro Met Glu Gln Cys Lys Arg Asn Ser Thr Ser
    130                 135                 140


Ile Tyr Phe Lys Met Glu Asn Asp Leu Pro Gln Lys Ile Gln Cys Thr
145                 150                 155                 160


Leu Ser Asn Pro Leu Phe Asn Thr Thr Ser Ser Ile Ile Leu Thr Thr
                165                 170                 175


Cys Ile Pro Ser Ser Gly His Ser Arg His Arg Tyr Ala Leu Ile Pro
            180                 185                 190


Ile Pro Leu Ala Val Ile Thr Thr Cys Ile Val Leu Tyr Met Asn Gly
        195                 200                 205


Ile Leu Lys Cys Asp Arg Lys Pro Asp Arg Thr Asn Ser Asn
    210                 215                 220


<210>  3239
<211>  187
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  LFA-3 ECD

<400>  3239

Phe Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His
1               5                   10                  15


Val Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys
            20                  25                  30
```

```
Asp Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser
        35                  40                  45

Phe Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile
    50                  55                  60

Tyr Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro
65                  70                  75                  80

Asn Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Leu
                85                  90                  95

Pro Ser Pro Thr Leu Thr Cys Ala Leu Thr Asn Gly Ser Ile Glu Val
            100                 105                 110

Gln Cys Met Ile Pro Glu His Tyr Asn Ser His Arg Gly Leu Ile Met
        115                 120                 125

Tyr Ser Trp Asp Cys Pro Met Glu Gln Cys Lys Arg Asn Ser Thr Ser
    130                 135                 140

Ile Tyr Phe Lys Met Glu Asn Asp Leu Pro Gln Lys Ile Gln Cys Thr
145                 150                 155                 160

Leu Ser Asn Pro Leu Phe Asn Thr Thr Ser Ser Ile Ile Leu Thr Thr
                165                 170                 175

Cys Ile Pro Ser Ser Gly His Ser Arg His Arg
            180                 185
```

<210> 3240
<211> 5
<212> PRT
<213> Artificial Sequence

<220>

<223> EAAAK Linker

<400> 3240

Glu Ala Ala Ala Lys
1   5

<210> 3241
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> 3x EAAAK Linker

<400> 3241

Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys
1   5   10   15

<210> 3242
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> 5x EAAAK Linker

<400> 3242

Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu
1   5   10   15

Ala Ala Ala Lys Glu Ala Ala Ala Lys
            20   25

<210> 3243
<211> 239
<212> PRT
<213> Artificial Sequence

<220>
<223> eGFP

<400> 3243

```
Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
1               5                  10                  15

Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
            20                  25                  30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
        35                  40                  45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
    50                  55                  60

Leu Thr Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
65                  70                  75                  80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
                85                  90                  95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
            100                 105                 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
        115                 120                 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
    130                 135                 140

Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
145                 150                 155                 160

Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
                165                 170                 175

Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
            180                 185                 190
```

```
Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu
        195                 200                 205


Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
    210                 215                 220


Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
225                 230                 235


<210>  3244
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v1 ECD

<400>  3244

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3245
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v2 ECD

<400>  3245

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3246
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v3 ECD

<400> 3246

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ala Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3247
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v4 ECD

<400>  3247

Val Ile His Met Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3248
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v5 ECD

<400>  3248

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3249
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v6 ECD

<400>  3249

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Leu Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ser Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3250
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v7 ECD

<400> 3250

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3251
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v8 ECD

<400> 3251

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Gly Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3252
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v9 ECD

<400>  3252

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3253
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v10 ECD

<400> 3253

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3254
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v11 ECD

<400>  3254

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Ala Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

```
Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3255
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v12 ECD

<400>  3255

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Asn Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3256
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v13 ECD

<400>  3256
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Ser Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Lys His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3257
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v14 ECD

<400> 3257

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Ser Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3258
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v15 ECD

<400>  3258

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Glu Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Thr Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3259
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v16 ECD

<400>  3259

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3260
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v17 ECD

<400> 3260

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Ser Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3261
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v18 ECD

<400> 3261

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Pro Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3262
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v19 ECD

<400>  3262

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Glu Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3263
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v20 ECD

<400> 3263

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3264
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v21 ECD

<400>  3264

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Val Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3265
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v22 ECD

<400>  3265

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Met Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3266
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v23 ECD

<400>  3266

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Thr Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Gly Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3267
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v24 ECD

<400> 3267

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3268
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v25 ECD

<400>  3268

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Gly Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3269
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v26 ECD

<400>  3269

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Ala Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3270
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v27 ECD

<400> 3270

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu His Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Ala Pro Ser
            100                 105                 110


Ile Ser Asp Leu Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3271
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v28 ECD

<400>  3271

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3272
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v29 ECD

<400>  3272

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Ser Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3273
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v30 ECD

<400>  3273

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Thr Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3274
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v31 ECD

<400> 3274

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Ala Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3275
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v32 ECD

<400> 3275

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Val Val Leu Asp Met Ile Ser Gly Asp Met Asn
35 40 45

Ile Gly Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Gly Glu Gly Thr Tyr
65 70 75 80

Glu Cys Ala Val Leu Lys Tyr Glu Glu Asp Ala Phe Lys Arg Glu His
85 90 95

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3276
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v33 ECD

<400>  3276

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Pro Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3277
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v34 ECD

<400> 3277

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Val Thr Leu Phe Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Gly Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Leu His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3278
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v35 ECD

<400>  3278

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Phe Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3279
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v36 ECD

<400> 3279

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Gly Pro Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3280
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v37 ECD

<400>  3280
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Leu Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Leu Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3281
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v38 ECD

<400> 3281

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3282
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v39 ECD

<400>  3282

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Ser
130 135 140

Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3283
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v40 ECD

<400> 3283

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

```
His Lys Glu Gly Lys Ile Val Leu Ala Thr Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Ser Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3284
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v41 ECD

<400> 3284

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Gly Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu Arg
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Ser Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3285
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v42 ECD

<400> 3285

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3286
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v43 ECD

<400>  3286

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Val Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Gln Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Arg Cys Val Val Ile Lys Tyr Glu Arg Leu Glu Asn Gln Gly Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3287
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v44 ECD

<400> 3287

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Ile Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3288
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v45 ECD

<400>  3288

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Arg Lys Gly Tyr Arg Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Ser Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Ser His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3289
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v46 ECD

<400> 3289

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Arg Lys Gly Tyr Arg Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3290
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v47 ECD

<400>  3290

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Gly Gln Ile Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Gly Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3291
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v48 ECD

<400> 3291

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Asp Arg Lys Gly Tyr Arg Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3292
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v49 ECD

<400>  3292

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Gly Gln Ile Val Met Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3293
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v50 ECD

<400>  3293

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Gly Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3294
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v51 ECD

<400> 3294

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile His Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Gly Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Asn Gly Glu Asn Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Ser Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3295
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v52 ECD

<400>  3295

Val Ile His Val Thr Lys Glu Val Lys Glu Val Thr Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Lys Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Ser Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3296
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v53 ECD

<400> 3296

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Val Ile Phe Trp
            20                  25                  30

Gln Lys Glu Gly Lys Leu Val Leu Thr Met Gln Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Arg Cys Ile Val Ile Lys Tyr Glu Arg Leu Glu Asn Gln Gly Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3297
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v54 ECD

<400>  3297

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Pro Ala Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3298
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 WT IgV

<400> 3298

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 3299
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v1 IgV

<400> 3299

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3300
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v20 IgV

<400> 3300

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3301
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v6 IgV

<400> 3301

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Leu Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ser Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  3302
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v7 IgV

<400>  3302

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Pro Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 3303
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v9 IgV

<400> 3303

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 3304
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v10 IgV

<400> 3304

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3305
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v11 IgV

<400> 3305

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Ala Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  3306
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v12 IgV

<400>  3306

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Asn Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3307
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v13 IgV

<400> 3307

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Ser Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Lys His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3308
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v14 IgV

<400> 3308

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Ser Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3309
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v15 IgV

<400> 3309

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Glu Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Thr Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 3310
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v16 IgV

<400> 3310

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 3311
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v17 IgV

<400> 3311

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Ser Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 3312
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v19 IgV

<400> 3312

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Glu Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3313
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v21 IgV

<400> 3313

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Val Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 3314
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v22 IgV

<400> 3314

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Met Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3315
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v23 IgV

<400> 3315

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Thr Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Gly Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  3316
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v24 IgV

<400>  3316

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 3317
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v25 IgV

<400> 3317

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Gly Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3318
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v26 IgV

<400> 3318

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 3319
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v27 IgV

<400> 3319

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu His Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3320
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v28 IgV

<400> 3320

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3321
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v30 IgV

<400> 3321

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Thr Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3322
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v32 IgV

<400> 3322

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Val Val Leu Asp Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Gly Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Gly Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Ala Val Leu Lys Tyr Glu Glu Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 3323
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v33 IgV

<400> 3323

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3324
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v34 IgV

<400> 3324

Val Ile His Val Thr Lys Glu Val Lys Glu Val Val Thr Leu Phe Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Gly Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3325
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v35 IgV

<400> 3325

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Phe Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  3326
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v36 IgV

<400>  3326

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Gly Pro Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 3327
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v37 IgV

<400> 3327

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Leu Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 3328
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v38 IgV

<400> 3328

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 3329
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v40 IgV

<400> 3329

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Thr Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  3330
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v41 IgV

<400>  3330

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Gly Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu Arg
85 90 95

Leu Ala Glu Val Thr
100

<210> 3331
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v43 IgV

<400> 3331

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Val Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Gln Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Arg Cys Val Val Ile Lys Tyr Glu Arg Leu Glu Asn Gln Gly Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3332
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v44 IgV

<400> 3332

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Ile Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3333
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v45 IgV

<400> 3333

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Arg Lys Gly Tyr Arg Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr
            100
```

<210> 3334
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v47 IgV

<400> 3334

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Gly Gln Ile Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Gly Val Thr
            100
```

<210> 3335
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v48 IgV

<400> 3335

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Asp Arg Lys Gly Tyr Arg Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 3336
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v49 IgV

<400> 3336

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Gly Gln Ile Val Met Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3337
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v50 IgV

<400> 3337

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Gly Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 3338
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v51 IgV

<400> 3338

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile His Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Gly Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Asn Gly Glu Asn Gly Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr
            100

<210> 3339
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v52 IgV

<400> 3339

Val Ile His Val Thr Lys Glu Val Lys Glu Val Thr Thr Leu Ser Cys
1   5   10   15

Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Val Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50   55   60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Lys Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100


<210>  3340
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v53 IgV

<400>  3340

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Val Ile Phe Trp
            20                  25                  30


Gln Lys Glu Gly Lys Leu Val Leu Thr Met Gln Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Arg Cys Ile Val Ile Lys Tyr Glu Arg Leu Glu Asn Gln Gly Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 3341
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v54 IgV

<400> 3341

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Pro Ala Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr
100

<210> 3342
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v55 ECD

<400> 3342

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3343
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v56 ECD

<400>  3343

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3344
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v57 ECD

<400>  3344

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3345
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v58 ECD

<400>  3345

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Arg Val Leu Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Thr Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3346
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v59 ECD

<400> 3346

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3347
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v60 ECD

<400>  3347

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Arg Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Glu Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3348
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v61 ECD

<400>  3348

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30
```

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Gly Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Val Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3349
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v62 ECD

<400> 3349

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3350
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v63 ECD

<400>  3350

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

```
Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3351
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v64 ECD

<400>  3351

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3352
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v65 ECD

<400>  3352
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3353
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v66ECD

<400> 3353

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3354
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v67 ECD

<400>  3354

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Leu Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3355
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v68 ECD

<400> 3355

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

```
His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3356
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v69 ECD

<400> 3356

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3357
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v70 ECD

<400> 3357

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3358
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v71 ECD

<400>  3358

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Tyr
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3359
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v72 ECD

<400> 3359

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Phe Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3360
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v73 ECD

<400>  3360

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3361
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v74 ECD

<400> 3361

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3362
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v75 ECD

<400>  3362

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Ile Leu Glu His
                85                  90                  95

Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3363
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v76 ECD

<400> 3363

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Ile Leu Glu His
85 90 95

Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Ser Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3364
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v77 ECD

<400>  3364

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3365
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v78 ECD

<400>  3365

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Asn Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Phe Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Ala Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3366
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v79 ECD

<400> 3366

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Ala Pro Val Phe Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3367
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v80 ECD

<400> 3367

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Ala Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3368
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v81 ECD

<400>  3368

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Ser Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3369
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v82 ECD

<400>  3369

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Ser Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3370
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v83 ECD

<400> 3370

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Ser
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Ala Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3371
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v84 ECD

<400>  3371

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3372
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v85 ECD

<400>  3372

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30
```

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Gly Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Leu Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3373
<211> 207
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v86 ECD

<400> 3373

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn Ile
        35                  40                  45


Trp Pro Glu Cys Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn Leu
    50                  55                  60


Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr Glu
65                  70                  75                  80


Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His Leu
                85                  90                  95


Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser Ile
            100                 105                 110


Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys Ser
        115                 120                 125


Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn Gly
    130                 135                 140


Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu Thr
145                 150                 155                 160


Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr Asn
                165                 170                 175
```

```
His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn Gln
            180                 185                 190


Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3374
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v87 ECD

<400>  3374

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

```
Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3375
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v88 ECD

<400>  3375

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Leu Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3376
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v89 ECD

<400>  3376
```

```
Val Ile His Val Thr Lys Glu Val Glu Arg Ser Gly Asn Ala Val Leu
1               5                  10                  15

Trp Tyr Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Cys Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asp Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3377
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v90 ECD

<400> 3377

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Met Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3378
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v91 ECD

<400>  3378

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Glu Cys Val Val Leu Lys Tyr Glu Glu Asp Ala Phe Glu Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3379
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v92 ECD

<400> 3379

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Pro Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

```
His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Ile
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe His Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Leu Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Ile Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3380
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v93 ECD

<400> 3380

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Leu Ser Asp Glu Gly Thr Asn
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3381
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v94 ECD

<400> 3381

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Pro Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Leu Ser Asp Glu Gly Thr Asn
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asn Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Gly Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3382
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v95 ECD

<400>  3382

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3383
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v96 ECD

<400> 3383

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Ser Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3384
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v97 ECD

<400>  3384

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Leu Ser Asp Glu Gly Thr Asn
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Ser Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3385
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v98 ECD

<400> 3385

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Gly
1 5 10 15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Gly Glu Gly Thr Tyr
65 70 75 80

```
Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Thr Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Ile Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn Arg Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asp
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3386
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v99 ECD

<400>  3386

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Phe Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Val Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Gly Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Gln Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3387
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v100 ECD

<400> 3387

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3388
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v101 ECD

<400>  3388

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Ser
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Phe Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Ile Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3389
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v102 ECD

<400>  3389

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Met Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Gly Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Asp Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3390
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v103 ECD

<400> 3390

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Pro Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3391
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v104 ECD

<400>  3391

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Pro Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3392
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v105 ECD

<400> 3392

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Thr Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3393
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v106 ECD

<400>  3393

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Pro Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3394
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v107 ECD

<400> 3394

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Ala Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Leu Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3395
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v108 ECD

<400>  3395

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95
```

```
Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Gln Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3396
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v109 ECD

<400>  3396

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30
```

```
His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3397
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v110 ECD

<400> 3397

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Ile Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3398
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v111 ECD

<400>  3398

Val Ile His Val Thr Lys Glu Val Lys Glu Val Gly Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Ala Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys His Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3399
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v112 ECD

<400> 3399

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Thr Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Ser Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3400
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v113 ECD

<400>  3400
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Ile Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Leu Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3401
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v114 ECD

<400> 3401

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Ala Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3402
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v115 ECD

<400>  3402

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3403
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v116 ECD

<400> 3403

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

```
His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Ile Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3404
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v117 ECD

<400> 3404

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Phe Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Ile Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3405
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v118 ECD

<400> 3405

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Thr Pro Thr Ser Asn Ile Arg Arg Ile Ile Arg
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3406
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v119 ECD

<400>  3406

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Arg Thr Cys Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Thr Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Pro Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Gly
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3407
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v120 ECD

<400> 3407

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Pro Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Ala Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3408
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v121 ECD

<400>  3408

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Pro Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3409
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v93 IgV

<400>  3409

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Leu Ser Asp Glu Gly Thr Asn
65                  70                  75                  80
```

```
Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Arg Ala Glu Val Thr
            100


<210>  3410
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v122 ECD

<400>  3410

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asp
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3411
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v123 ECD

<400> 3411

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ala Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3412
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v124 ECD

<400>  3412
```

```
Val Ile His Met Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3413
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v125 ECD

<400> 3413

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3414
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v126 ECD

<400>  3414

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Ser
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3415
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v127 ECD

<400>  3415

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Leu Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3416
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v128 ECD

<400> 3416

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Gly Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3417
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v129 ECD

<400> 3417

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3418
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v130 ECD

<400>  3418

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Ser Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3419
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v131 ECD

<400> 3419

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Ala Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3420
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v132 ECD

<400>  3420

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Ser Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Lys His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Val Ile Cys
        115                 120                 125
```

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Asn Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3421
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v133 ECD

<400> 3421

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Ser Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Thr Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3422
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v134 ECD

<400>  3422

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Glu Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Thr Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3423
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v135 ECD

<400> 3423

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asn Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

```
Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3424
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v136 ECD

<400>  3424

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Glu Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Ser Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Glu Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3425
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v137 ECD

<400>  3425

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Val Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3426
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v138 ECD

<400> 3426

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Met Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu His Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3427
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v139 ECD

<400>  3427

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Thr Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Gly Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3428
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v140 ECD

<400>  3428

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Gly Met Leu Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Val Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3429
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v141 ECD

<400>  3429

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

His Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Ala Pro Ser
            100                 105                 110

Ile Ser Asp Leu Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3430
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v142 ECD

<400> 3430

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3431
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v143 ECD

<400>  3431

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr His Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Gly Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3432
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v144 ECD

<400>  3432

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Thr Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe His Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3433
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v145 ECD

<400> 3433

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Ala Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3434
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v146 ECD

<400>  3434

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Val Val Leu Asp Met Ile Ser Gly Asp Met Asn
        35                  40                  45


Ile Gly Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Gly Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Ala Val Leu Lys Tyr Glu Glu Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Val Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3435
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v147 ECD

<400> 3435

Val Ile His Val Thr Lys Glu Val Lys Glu Val Val Thr Leu Phe Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile His Trp
20 25 30

Gln Lys Glu Lys Lys Leu Val Leu Gly Met Leu Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asn Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Leu His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asp Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3436
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v148 ECD

<400>  3436
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Phe Val Ile Arg Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Gly Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3437
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v149 ECD

<400> 3437

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Gly Pro Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3438
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v150 ECD

<400>  3438

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Leu Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Leu Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3439
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v151 ECD

<400>  3439

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Asp Arg Lys Gly Tyr Arg Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Ile Pro Thr Ser Ser Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Ser His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3440
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v152 ECD

<400> 3440

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Gly Gln Ile Val Met Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Gly Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3441
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v153 ECD

<400> 3441

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Gly Lys Met Val Met Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3442
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v154 ECD

<400>  3442

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3443
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v155 ECD

<400> 3443

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3444
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v156 ECD

<400>  3444

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3445
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v157 ECD

<400>  3445

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Thr Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3446
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v158 ECD

<400>  3446

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asp
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Leu Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3447
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v159 ECD

<400> 3447

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Arg Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Glu Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

```
Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3448
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v160 ECD

<400>  3448

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95
```

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Gly Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Val Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3449
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v161 ECD

<400>  3449

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Val Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3450
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v162 ECD

<400> 3450

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3451
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v163 ECD

<400>  3451

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3452
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v164 ECD

<400>  3452

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Leu Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3453
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v165 ECD

<400>  3453

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3454
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v166 ECD

<400> 3454

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Leu Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140
```

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3455
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v167 ECD

<400> 3455

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

```
Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asp Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3456
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v168 ECD

<400>  3456

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30
```

```
His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3457
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v169 ECD

<400> 3457

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Tyr
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175
```

```
Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3458
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v170 ECD

<400>  3458

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Asp Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110
```

Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3459
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v171 ECD

<400> 3459

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

```
Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3460
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v172 ECD

<400>  3460
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Asn Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Phe Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Ala Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Val Ile Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3461
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v173 ECD

<400> 3461

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Phe Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

```
Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3462
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v174 ECD

<400>  3462

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
115 120 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
130 135 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145 150 155 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Ala Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3463
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v175 ECD

<400> 3463

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

```
His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Ser Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3464
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v176 ECD

<400> 3464

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Ser
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Ala Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
165 170 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
180 185 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
195 200 205

<210> 3465
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v177 ECD

<400> 3465

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
20 25 30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
100 105 110

```
Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3466
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v178 ECD

<400>  3466

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Gly Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Leu Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3467
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v179 ECD

<400> 3467

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                  10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45

Ile Trp Pro Glu Cys Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Glu Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190
```

```
Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3468
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v180 ECD

<400>  3468

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Ser Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125
```

```
Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Glu Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3469
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v181 ECD

<400>  3469

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Cys Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Gly Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Asp Ala Ile Thr Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160


Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3470
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v182 ECD

<400>  3470

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15
```

```
Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30

His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80

Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110

Ile Ser Asp Phe Glu Val Pro Ser Ser Asn Ile Arg Arg Ile Thr Cys
        115                 120                 125

Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140

Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160

Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175

Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly Asp Leu Arg Val Asn
            180                 185                 190

Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205
```

<210> 3471
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v183 ECD

<400> 3471

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser
            100                 105                 110


Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile Ile Cys
        115                 120                 125


Ser Ala Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu Glu Asn
    130                 135                 140


Gly Glu Glu Leu Ser Ala Ile Asn Thr Thr Val Ser Gln Asp Pro Glu
145                 150                 155                 160
```

```
Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met Thr Thr
                165                 170                 175


Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg Val Asn
            180                 185                 190


Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro Asp Asn
        195                 200                 205


<210>  3472
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v153 IgV

<400>  3472

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Gly Lys Met Val Met Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95
```

Leu Ala Glu Val Thr
100

<210> 3473
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v153 IgV

<400> 3473

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Gly Lys Met Val Met Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3474
<211> 18
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 trailing sequence

<400> 3474

Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser Ile Ser Asp Phe Glu
1 5 10 15

Ile Pro

<210> 3475
<211> 107
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD80 IgV wildtype

<400> 3475

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3476
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v46 IgV

<400> 3476

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Arg Lys Gly Tyr Arg Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3477
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v1 IgV

<400> 3477

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Gln Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 3478
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v20 IgV

<400> 3478

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

```
Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  3479
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v43 IgV

<400>  3479

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Val Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Gln Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60
```

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Arg Cys Val Val Ile Lys Tyr Glu Arg Leu Glu Asn Gln Gly Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3480
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v44 IgV

<400> 3480

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Ile Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3481
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v18 IgV

<400> 3481

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Pro Val Lys Ala Asp
            100   105

<210> 3482
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v48 IgV

<400> 3482

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Asp Arg Lys Gly Tyr Arg Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3483
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v49 IgV

<400> 3483

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Gly Gln Ile Val Met Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3484
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v50 IgV

<400> 3484

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 5 10 15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
20 25 30

Gln Lys Glu Gly Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  3485
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v53 IgV

<400>  3485

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Val Ile Phe Trp
            20                  25                  30


Gln Lys Glu Gly Lys Leu Val Leu Thr Met Gln Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Arg Cys Ile Val Ile Lys Tyr Glu Arg Leu Glu Asn Gln Gly Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105
```

<210> 3486
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v54 IgV

<400> 3486

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   5   10   15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20   25   30

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35   40   45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50   55   60

Leu Ser Ile Met Ile Pro Ala Pro Arg Pro Ser Asp Glu Gly Thr Tyr
65   70   75   80

Glu Cys Val Val Leu Glu Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
                85   90   95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100   105

<210> 3487
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v93 IgV

<400> 3487

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly Leu Asn Val Ser Val Glu Glu Leu Ala Gln Thr Asp Ile Leu Trp
            20                  25                  30


His Lys Glu Gly Lys Ile Val Leu Ala Met Arg Ser Gly Asp Thr Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Leu Ser Asp Glu Gly Thr Asn
65                  70                  75                  80


Val Cys Val Val Arg Lys Tyr Glu Asn Asp Thr Pro Val Leu Glu His
                85                  90                  95


Arg Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  3488
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v19 IgV

<400>  3488

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45
```

```
Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80


Glu Cys Val Val Leu Lys Tyr Glu Glu Asp Ala Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
            100                 105


<210>  3489
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v29 IgV

<400>  3489

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15


Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30


Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
        35                  40                  45


Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
    50                  55                  60


Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65                  70                  75                  80
```

```
Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Gly Phe Lys Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr Ser Ser Val Lys Ala Asp
            100                 105


<210>  3490
<211>  100
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD4 IgV

<400>  3490

Lys Lys Val Val Leu Gly Lys Lys Gly Asp Thr Val Glu Leu Thr Cys
1               5                   10                  15


Thr Ala Ser Gln Lys Lys Ser Ile Gln Phe His Trp Lys Asn Ser Asn
            20                  25                  30


Gln Ile Lys Ile Leu Gly Asn Gln Gly Ser Phe Leu Thr Lys Gly Pro
        35                  40                  45


Ser Lys Leu Asn Asp Arg Ala Asp Ser Arg Arg Ser Leu Trp Asp Gln
    50                  55                  60


Gly Asn Phe Pro Leu Ile Ile Lys Asn Leu Lys Ile Glu Asp Ser Asp
65                  70                  75                  80


Thr Tyr Ile Cys Glu Val Glu Asp Gln Lys Glu Glu Val Gln Leu Leu
                85                  90                  95


Val Phe Gly Leu
            100
```

<210> 3491
<211> 114
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD8A IgV

<400> 3491

Ser Gln Phe Arg Val Ser Pro Leu Asp Arg Thr Trp Asn Leu Gly Glu
1 5 10 15

Thr Val Glu Leu Lys Cys Gln Val Leu Leu Ser Asn Pro Thr Ser Gly
20 25 30

Cys Ser Trp Leu Phe Gln Pro Arg Gly Ala Ala Ala Ser Pro Thr Phe
35 40 45

Leu Leu Tyr Leu Ser Gln Asn Lys Pro Lys Ala Ala Glu Gly Leu Asp
50 55 60

Thr Gln Arg Phe Ser Gly Lys Arg Leu Gly Asp Thr Phe Val Leu Thr
65 70 75 80

Leu Ser Asp Phe Arg Arg Glu Asn Glu Gly Tyr Tyr Phe Cys Ser Ala
85 90 95

Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe Val Pro Val Phe Leu
100 105 110

Pro Ala

<210> 3492
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> LAG3 IgV

<400> 3492

```
Gly Ala Pro Ala Gln Leu Pro Cys Ser Pro Thr Ile Pro Leu Gln Asp
1               5                  10                  15


Leu Ser Leu Leu Arg Arg Ala Gly Val Thr Trp Gln His Gln Pro Asp
            20                  25                  30


Ser Gly Pro Pro Ala Ala Ala Pro Gly His Pro Leu Ala Pro Gly Pro
        35                  40                  45


His Pro Ala Ala Pro Ser Ser Trp Gly Pro Arg Pro Arg Arg Tyr Thr
    50                  55                  60


Val Leu Ser Val Gly Pro Gly Gly Leu Arg Ser Gly Arg Leu Pro Leu
65                  70                  75                  80


Gln Pro Arg Val Gln Leu Asp Glu Arg Gly Arg Gln Arg Gly Asp Phe
                85                  90                  95


Ser Leu Trp Leu Arg Pro Ala Arg Arg Ala Asp Ala Gly Glu Tyr Arg
            100                 105                 110


Ala Ala Val His Leu Arg Asp Arg Ala Leu Ser Cys Arg Leu Arg Leu
        115                 120                 125


Arg Leu Gly
    130
```

<210> 3493
<211> 243
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD48

<400> 3493

```
Met Cys Ser Arg Gly Trp Asp Ser Cys Leu Ala Leu Glu Leu Leu Leu
1               5                   10                  15


Leu Pro Leu Ser Leu Leu Val Thr Ser Ile Gln Gly His Leu Val His
            20                  25                  30


Met Thr Val Val Ser Gly Ser Asn Val Thr Leu Asn Ile Ser Glu Ser
        35                  40                  45


Leu Pro Glu Asn Tyr Lys Gln Leu Thr Trp Phe Tyr Thr Phe Asp Gln
    50                  55                  60


Lys Ile Val Glu Trp Asp Ser Arg Lys Ser Lys Tyr Phe Glu Ser Lys
65                  70                  75                  80


Phe Lys Gly Arg Val Arg Leu Asp Pro Gln Ser Gly Ala Leu Tyr Ile
                85                  90                  95


Ser Lys Val Gln Lys Glu Asp Asn Ser Thr Tyr Ile Met Arg Val Leu
            100                 105                 110


Lys Lys Thr Gly Asn Glu Gln Glu Trp Lys Ile Lys Leu Gln Val Leu
        115                 120                 125


Asp Pro Val Pro Lys Pro Val Ile Lys Ile Glu Lys Ile Glu Asp Met
    130                 135                 140


Asp Asp Asn Cys Tyr Leu Lys Leu Ser Cys Val Ile Pro Gly Glu Ser
145                 150                 155                 160
```

```
Val Asn Tyr Thr Trp Tyr Gly Asp Lys Arg Pro Phe Pro Lys Glu Leu
                165                 170                 175


Gln Asn Ser Val Leu Glu Thr Thr Leu Met Pro His Asn Tyr Ser Arg
            180                 185                 190


Cys Tyr Thr Cys Gln Val Ser Asn Ser Val Ser Ser Lys Asn Gly Thr
        195                 200                 205


Val Cys Leu Ser Pro Pro Cys Thr Leu Ala Arg Ser Phe Gly Val Glu
    210                 215                 220


Trp Ile Ala Ser Trp Leu Val Val Thr Val Pro Thr Ile Leu Gly Leu
225                 230                 235                 240


Leu Leu Thr



<210>  3494
<211>  194
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  CD48 ECD

<400>  3494

Gln Gly His Leu Val His Met Thr Val Val Ser Gly Ser Asn Val Thr
1               5                   10                  15


Leu Asn Ile Ser Glu Ser Leu Pro Glu Asn Tyr Lys Gln Leu Thr Trp
            20                  25                  30


Phe Tyr Thr Phe Asp Gln Lys Ile Val Glu Trp Asp Ser Arg Lys Ser
        35                  40                  45
```

```
Lys Tyr Phe Glu Ser Lys Phe Lys Gly Arg Val Arg Leu Asp Pro Gln
    50                  55                  60

Ser Gly Ala Leu Tyr Ile Ser Lys Val Gln Lys Glu Asp Asn Ser Thr
65                  70                  75                  80

Tyr Ile Met Arg Val Leu Lys Lys Thr Gly Asn Glu Gln Glu Trp Lys
                85                  90                  95

Ile Lys Leu Gln Val Leu Asp Pro Val Pro Lys Pro Val Ile Lys Ile
            100                 105                 110

Glu Lys Ile Glu Asp Met Asp Asp Asn Cys Tyr Leu Lys Leu Ser Cys
        115                 120                 125

Val Ile Pro Gly Glu Ser Val Asn Tyr Thr Trp Tyr Gly Asp Lys Arg
    130                 135                 140

Pro Phe Pro Lys Glu Leu Gln Asn Ser Val Leu Glu Thr Thr Leu Met
145                 150                 155                 160

Pro His Asn Tyr Ser Arg Cys Tyr Thr Cys Gln Val Ser Asn Ser Val
                165                 170                 175

Ser Ser Lys Asn Gly Thr Val Cys Leu Ser Pro Pro Cys Thr Leu Ala
            180                 185                 190

Arg Ser
```

<210> 3495
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> CTLA-4 wt ECD

<400> 3495

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp Gln
115 120 125

<210> 3496
<211> 266
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2264

<400> 3496

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205
```

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
210 215 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225 230 235 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp
245 250 255

Asp Asp Asp Lys His His His His His His
260 265

<210> 3497
<211> 266
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2266

<400> 3497

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

```
Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp
                245                 250                 255

Asp Asp Asp Lys His His His His His His
            260                 265
```

<210> 3498
<211> 253

<212> PRT
<213> Artificial sequence

<220>
<223> PD-L2 1417 -ICOSL 2266

<400> 3498

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                  10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110


Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val
        115                 120                 125


Gly Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe
    130                 135                 140


Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr
145                 150                 155                 160
```

```
Val Val Thr Tyr His Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp
                165                 170                 175


Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg
            180                 185                 190


Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln
        195                 200                 205


Lys Phe His Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val
    210                 215                 220


Leu Ser Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp
225                 230                 235                 240


Tyr Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250


<210>  3499
<211>  253
<212>  PRT
<213>  Artificial sequence

<220>
<223>  PD-L2 1417 - ICOSL 2264:

<400>  3499

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60
```

```
Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val
        115                 120                 125

Gly Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe
    130                 135                 140

Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr
145                 150                 155                 160

Val Val Thr Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp
                165                 170                 175

Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg
            180                 185                 190

Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln
        195                 200                 205

Lys Phe His Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val
    210                 215                 220

Leu Ser Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp
225                 230                 235                 240

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
                245                 250
```

<210> 3500
<211> 533
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 -PD-L1 303 - ICOSL 2264 -ICOSL 2264

<400> 3500

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100   105   110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115   120   125

Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr
    130   135   140

```
Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu
145                 150                 155                 160


Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile
                165                 170                 175


Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser
            180                 185                 190


Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
        195                 200                 205


Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
    210                 215                 220


Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr
225                 230                 235                 240


Val Lys Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
                245                 250                 255


Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly
            260                 265                 270


Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp
        275                 280                 285


Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val
    290                 295                 300


Val Thr Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser
305                 310                 315                 320


Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly
                325                 330                 335
```

```
Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys
            340                 345                 350

Phe His Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu
        355                 360                 365

Ser Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser
    370                 375                 380

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Thr Gln
385                 390                 395                 400

Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu Leu Ser Cys
                405                 410                 415

Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val Tyr Val Tyr
            420                 425                 430

Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His Ile Pro Gln
        435                 440                 445

His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn Arg Ala Leu
    450                 455                 460

Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu Arg Leu Phe
465                 470                 475                 480

Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu Val Leu Ser
                485                 490                 495

Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val Thr Leu His
            500                 505                 510

Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp Asp Asp Asp Lys His
        515                 520                 525
```

His His His His His
    530

<210> 3501
<211> 396
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2264 - PD-L1 303

<400> 3501

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1   5   10   15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20   25   30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35   40   45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50   55   60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65   70   75   80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85   90   95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100   105   110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115   120   125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130   135   140

```
Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val
            260                 265                 270

Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
        275                 280                 285

Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
    290                 295                 300

Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
305                 310                 315                 320

Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
                325                 330                 335
```

```
Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
            340                 345                 350


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
        355                 360                 365


Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Asp Tyr
    370                 375                 380


Lys Asp Asp Asp Asp Lys His His His His His His
385                 390                 395


<210>  3502
<211>  533
<212>  PRT
<213>  Artificial sequence

<220>
<223>  PD-L1 303  - ICOSL 2264 - ICOSL 2264  - PD-L1 303

<400>  3502

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys
            260                 265                 270
```

```
Glu Val Arg Ala Met Val Gly Ser Asp Val Glu Leu Ser Cys Ala Cys
        275                 280                 285

Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln
    290                 295                 300

Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His Ile Pro Gln His Ser
305                 310                 315                 320

Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser
                325                 330                 335

Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu Arg Leu Phe Asn Val
            340                 345                 350

Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu Val Leu Ser Arg Ser
        355                 360                 365

Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val Thr Leu His Val Ala
    370                 375                 380

Ala Asn Phe Ser Val Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly
385                 390                 395                 400

Gly Gly Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val
                405                 410                 415

Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys
            420                 425                 430

Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys
        435                 440                 445

Asp Ile Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His
    450                 455                 460
```

Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu
465 470 475 480

Gly Asn Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly
485 490 495

Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg
500 505 510

Ile Thr Val Lys Val Asn Ala Asp Tyr Lys Asp Asp Asp Asp Lys His
515 520 525

His His His His His
530

<210> 3503
<211> 45
<212> PRT
<213> Artificial sequence

<220>
<223> Moiety: COMP

<400> 3503

Asp Leu Gly Pro Gln Met Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala
1 5 10 15

Leu Gln Asp Val Arg Glu Leu Leu Arg Gln Gln Val Arg Glu Ile Thr
20 25 30

Phe Leu Lys Asn Thr Val Met Glu Cys Asp Ala Cys Gly
35 40 45

<210> 3504
<211> 33
<212> PRT
<213> Artificial sequence

<220>

<223> Moiety: VASP

<400> 3504

```
Asp Leu Gln Arg Val Lys Gln Glu Leu Leu Glu Glu Val Lys Lys Glu
1               5                   10                  15


Leu Gln Lys Val Lys Glu Glu Ile Ile Glu Ala Phe Val Gln Glu Leu
            20                  25                  30


Arg
```

<210> 3505
<211> 40
<212> PRT
<213> Artificial sequence

<220>
<223> Moiety: ZZ12.6

<400> 3505

```
Asp Val Gln Ala Ile Ser Ser Thr Ile Gln Asp Leu Gln Asp Gln Val
1               5                   10                  15


Asp Ser Leu Ala Glu Val Val Leu Gln Asn Arg Arg Gly Leu Asp Leu
            20                  25                  30


Leu Thr Arg Ser Gly Gly Gly Ser
        35                  40
```

<210> 3506
<211> 189
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - COMP

<400> 3506

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Leu Gly Pro Gln Met Leu Arg Glu Leu Gln Glu Thr Asn
    130                 135                 140

Ala Ala Leu Gln Asp Val Arg Glu Leu Leu Arg Gln Gln Val Arg Glu
145                 150                 155                 160

Ile Thr Phe Leu Lys Asn Thr Val Met Glu Cys Asp Ala Cys Gly Asp
                165                 170                 175

Tyr Lys Asp Asp Asp Asp Lys His His His His His His
            180                 185
```

<210> 3507
<211> 326
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2264 - COMP

<400> 3507

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140


Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160
```

```
Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Leu Gly Pro Gln
            260                 265                 270

Met Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln Asp Val Arg
        275                 280                 285

Glu Leu Leu Arg Gln Gln Val Arg Glu Ile Thr Phe Leu Lys Asn Thr
    290                 295                 300

Val Met Glu Cys Asp Ala Cys Gly Asp Tyr Lys Asp Asp Asp Asp Lys
305                 310                 315                 320

His His His His His His
                325
```

<210> 3508
<211> 177

<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - VASP

<400> 3508

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Asp Leu Gln Arg Val Lys Gln Glu Leu Leu Glu Glu Val Lys
    130                 135                 140


Lys Glu Leu Gln Lys Val Lys Glu Glu Ile Ile Glu Ala Phe Val Gln
145                 150                 155                 160
```

Glu Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His
165 170 175

His

<210> 3509
<211> 314
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2264 - VASP

<400> 3509

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

```
Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Leu Gln Arg Val
            260                 265                 270

Lys Gln Glu Leu Leu Glu Glu Val Lys Lys Glu Leu Gln Lys Val Lys
        275                 280                 285

Glu Glu Ile Ile Glu Ala Phe Val Gln Glu Leu Arg Asp Tyr Lys Asp
    290                 295                 300

Asp Asp Asp Lys His His His His His His
305                 310
```

<210> 3510
<211> 175
<212> PRT
<213> Artificial sequence

<220>
<223> ZZ12.6 - PD-L1 303

<400> 3510

Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His His Gly Gly
1   5   10   15

Gly Gly Ser Ser Asp Val Gln Ala Ile Ser Ser Thr Ile Gln Asp Leu
            20   25   30

Gln Asp Gln Val Asp Ser Leu Ala Glu Val Val Leu Gln Asn Arg Arg
        35   40   45

Gly Leu Asp Leu Leu Thr Arg Ser Gly Gly Gly Ser Phe Thr Val Thr
    50   55   60

Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile
65   70   75   80

Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile
                85   90   95

Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly
            100   105   110

Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg
        115   120   125

Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr
    130   135   140

Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr
145 150 155 160

Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
165 170 175

<210> 3511
<211> 184
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ZZ12.6

<400> 3511

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

```
Gly Ser Asp Val Gln Ala Ile Ser Ser Thr Ile Gln Asp Leu Gln Asp
    130                 135                 140

Gln Val Asp Ser Leu Ala Glu Val Val Leu Gln Asn Arg Arg Gly Leu
145                 150                 155                 160

Asp Leu Leu Thr Arg Ser Gly Gly Gly Ser Asp Tyr Lys Asp Asp Asp
                165                 170                 175

Asp Lys His His His His His His
            180
```

<210> 3512
<211> 354
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L2 1417 - Fc

<400> 3512

```
Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80
```

```
Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95

Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110

Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys
        115                 120                 125

Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu
    130                 135                 140

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
145                 150                 155                 160

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
                165                 170                 175

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
            180                 185                 190

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
        195                 200                 205

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
    210                 215                 220

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
225                 230                 235                 240

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Cys Thr Leu Pro Pro Ser
                245                 250                 255

Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys
            260                 265                 270
```

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
275 280 285

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
290 295 300

Ser Phe Phe Leu Val Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
305 310 315 320

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
325 330 335

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly His His His His
340 345 350

His His

<210> 3513
<211> 497
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2266 - Fc

<400> 3513

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

```
Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
        115                 120                 125

Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser
    130                 135                 140

Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu
145                 150                 155                 160

Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val
                165                 170                 175

Thr Tyr His Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg
            180                 185                 190

Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp
        195                 200                 205

Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe
    210                 215                 220

His Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser
225                 230                 235                 240

Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly
                245                 250                 255
```

```
Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys
            260                 265                 270

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro
        275                 280                 285

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
    290                 295                 300

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
305                 310                 315                 320

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
                325                 330                 335

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
            340                 345                 350

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
        355                 360                 365

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
    370                 375                 380

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
385                 390                 395                 400

Leu Pro Pro Cys Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Trp
                405                 410                 415

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
            420                 425                 430

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
        435                 440                 445
```

```
Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
    450                 455                 460

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
465                 470                 475                 480

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
                485                 490                 495

Lys
```

<210> 3514
<211> 243
<212> PRT
<213> Artificial sequence

<220>
<223> Hole Fc

<400> 3514

```
His Met Ser Ser Val Ser Ala Gln Ala Ala Ala Glu Pro Lys Ser Ser
1               5                   10                  15

Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly
            20                  25                  30

Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
        35                  40                  45

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
    50                  55                  60

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
65                  70                  75                  80
```

```
His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
                85                  90                  95

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
            100                 105                 110

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
        115                 120                 125

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
    130                 135                 140

Cys Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser
145                 150                 155                 160

Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
                165                 170                 175

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
            180                 185                 190

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
        195                 200                 205

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
    210                 215                 220

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
225                 230                 235                 240

Pro Gly Lys
```

<210> 3515
<211> 497
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2264 - Fc

<400> 3515

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
        115                 120                 125


Gly Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser
    130                 135                 140


Asp Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu
145                 150                 155                 160


Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val
                165                 170                 175
```

```
Thr Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg
            180                 185                 190

Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp
        195                 200                 205

Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe
    210                 215                 220

His Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser
225                 230                 235                 240

Val Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly
                245                 250                 255

Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys
            260                 265                 270

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro
        275                 280                 285

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
    290                 295                 300

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
305                 310                 315                 320

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
                325                 330                 335

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
            340                 345                 350

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
        355                 360                 365
```

```
Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
    370                 375                 380

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
385                 390                 395                 400

Leu Pro Pro Cys Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Trp
                405                 410                 415

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
            420                 425                 430

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
        435                 440                 445

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
    450                 455                 460

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
465                 470                 475                 480

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
                485                 490                 495

Lys
```

<210> 3516
<211> 495
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2266 - Fc

<400> 3516

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr
            180                 185                 190
```

```
Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly
                245                 250                 255

Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr
            260                 265                 270

His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser
        275                 280                 285

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
    290                 295                 300

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
305                 310                 315                 320

Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
                325                 330                 335

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
            340                 345                 350

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
        355                 360                 365

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
    370                 375                 380
```

```
Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
385                 390                 395                 400


Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
                405                 410                 415


Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
            420                 425                 430


Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
        435                 440                 445


Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
    450                 455                 460


Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
465                 470                 475                 480


Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
                485                 490                 495


<210>  3517
<211>  495
<212>  PRT
<213>  Artificial sequence

<220>
<223>  PD-L1 303 - ICOSL 2264 - Fc

<400>  3517

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45
```

```
Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240
```

```
Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly
                245                 250                 255

Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr
            260                 265                 270

His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser
        275                 280                 285

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
    290                 295                 300

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
305                 310                 315                 320

Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
                325                 330                 335

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
            340                 345                 350

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
        355                 360                 365

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
    370                 375                 380

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
385                 390                 395                 400

Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
                405                 410                 415

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
            420                 425                 430
```

```
Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
        435                 440                 445


Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
    450                 455                 460


Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
465                 470                 475                 480


Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
                485                 490                 495


<210>  3518
<211>  500
<212>  PRT
<213>  Artificial sequence

<220>
<223>  PD-L1 303 - CTLA-4 3495 - Fc

<400>  3518

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser
    130                 135                 140

Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys
145                 150                 155                 160

Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val
                165                 170                 175

Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe
            180                 185                 190

Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn
        195                 200                 205

Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys
    210                 215                 220

Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn
225                 230                 235                 240

Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro Asp Ser Asp
                245                 250                 255

Gln Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
            260                 265                 270
```

```
Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
        275                 280                 285

Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
    290                 295                 300

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
305                 310                 315                 320

Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
                325                 330                 335

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
            340                 345                 350

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
        355                 360                 365

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
    370                 375                 380

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
385                 390                 395                 400

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
                405                 410                 415

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
            420                 425                 430

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
        435                 440                 445

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
    450                 455                 460
```

```
Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
465                 470                 475                 480


Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
                485                 490                 495


Leu Ser Pro Gly
            500


<210>  3519
<211>  487
<212>  PRT
<213>  Artificial sequence

<220>
<223>  PD-L2 1417 - CTLA-4 3495 - Fc

<400>  3519

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1               5                   10                  15


Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
            20                  25                  30


Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
        35                  40                  45


Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
    50                  55                  60


Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65                  70                  75                  80


Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
                85                  90                  95


Thr Leu Lys Val Lys Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser
            100                 105                 110
```

```
Gly Gly Gly Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val
        115                 120                 125

Leu Ala Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser
    130                 135                 140

Pro Gly Lys Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp
145                 150                 155                 160

Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu
                165                 170                 175

Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn
            180                 185                 190

Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu
        195                 200                 205

Tyr Ile Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly
    210                 215                 220

Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Ser Pro
225                 230                 235                 240

Asp Ser Asp Gln Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser
                245                 250                 255

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
            260                 265                 270

Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
        275                 280                 285

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
    290                 295                 300
```

```
Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
305                 310                 315                 320

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
                325                 330                 335

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
            340                 345                 350

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
        355                 360                 365

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
    370                 375                 380

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
385                 390                 395                 400

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
                405                 410                 415

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
            420                 425                 430

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
        435                 440                 445

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
    450                 455                 460

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
465                 470                 475                 480

Ser Leu Ser Leu Ser Pro Gly
                485
```

<210> 3520
<211> 500
<212> PRT
<213> Artificial sequence

<220>
<223> CTLA-4 2655 - PD-L1 303 - Fc

<400> 3520

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gln Gly
115 120 125

Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr
130 135 140

```
Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met
145                 150                 155                 160


Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala
                165                 170                 175


Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val
            180                 185                 190


His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg
        195                 200                 205


Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln
    210                 215                 220


Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile
225                 230                 235                 240


Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn
                245                 250                 255


Ala Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
            260                 265                 270


Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
        275                 280                 285


Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
    290                 295                 300


Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
305                 310                 315                 320


Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
                325                 330                 335
```

```
Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
            340                 345                 350

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
        355                 360                 365

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
    370                 375                 380

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
385                 390                 395                 400

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
                405                 410                 415

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
            420                 425                 430

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
        435                 440                 445

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
    450                 455                 460

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
465                 470                 475                 480

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
                485                 490                 495

Leu Ser Pro Gly
            500
```

<210> 3521
<211> 500
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - CTLA-4 2655 - Fc

<400> 3521

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser
    130                 135                 140


Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys
145                 150                 155                 160


Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val
                165                 170                 175
```

```
Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe
            180                 185                 190

Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn
        195                 200                 205

Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys
    210                 215                 220

Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn
225                 230                 235                 240

Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
                245                 250                 255

Gln Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
            260                 265                 270

Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
        275                 280                 285

Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
    290                 295                 300

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
305                 310                 315                 320

Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
                325                 330                 335

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
            340                 345                 350

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
        355                 360                 365
```

```
Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
    370                 375                 380

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
385                 390                 395                 400

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
                405                 410                 415

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
            420                 425                 430

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
        435                 440                 445

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
    450                 455                 460

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
465                 470                 475                 480

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
                485                 490                 495

Leu Ser Pro Gly
            500
```

<210> 3522
<211> 499
<212> PRT
<213> Artificial sequence

<220>
<223> CTLA-4 3037 - PD-L1 303 -Fc

<400> 3522

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                  10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser
        115                 120                 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val
    130                 135                 140

Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr
145                 150                 155                 160

Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu
                165                 170                 175

Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His
            180                 185                 190
```

```
Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala
        195                 200                 205

Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile
    210                 215                 220

Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser
225                 230                 235                 240

Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
                245                 250                 255

Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser
            260                 265                 270

Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu
        275                 280                 285

Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
    290                 295                 300

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
305                 310                 315                 320

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
                325                 330                 335

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
            340                 345                 350

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
        355                 360                 365

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
    370                 375                 380
```

```
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
385                 390                 395                 400


Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
                405                 410                 415


Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
            420                 425                 430


Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
        435                 440                 445


Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
    450                 455                 460


Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
465                 470                 475                 480


Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
                485                 490                 495


Ser Pro Gly
```

<210> 3523
<211> 499
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - CTLA-4 3037 - Fc

<400> 3523

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30
```

```
Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser
    130                 135                 140

Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys
145                 150                 155                 160

Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val
                165                 170                 175

Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe
            180                 185                 190

Pro Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn
        195                 200                 205

Leu Thr Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys
    210                 215                 220
```

```
Lys Val Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn
225                 230                 235                 240

Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
                245                 250                 255

Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser
            260                 265                 270

Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu
        275                 280                 285

Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
    290                 295                 300

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
305                 310                 315                 320

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
                325                 330                 335

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
            340                 345                 350

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
        355                 360                 365

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
    370                 375                 380

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
385                 390                 395                 400

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
                405                 410                 415
```

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
420 425 430

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
435 440 445

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
450 455 460

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
465 470 475 480

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
485 490 495

Ser Pro Gly

<210> 3524
<211> 497
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - Fc - CTLA-4 3037

<400> 3524

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

```
Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
        115                 120                 125

Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
    130                 135                 140

Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
145                 150                 155                 160

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
                165                 170                 175

Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
            180                 185                 190

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
        195                 200                 205

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
    210                 215                 220

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
225                 230                 235                 240
```

```
Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
               245                 250                 255

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
            260                 265                 270

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
        275                 280                 285

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
    290                 295                 300

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
305                 310                 315                 320

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
               325                 330                 335

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
            340                 345                 350

Leu Ser Pro Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
        355                 360                 365

Gly Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala
    370                 375                 380

Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp
385                 390                 395                 400

Lys Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln
               405                 410                 415

Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr
            420                 425                 430
```

Phe Pro Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val
435 440 445

Asn Leu Thr Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile
450 455 460

Cys Lys Val Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly
465 470 475 480

Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser
485 490 495

Asp

<210> 3525
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303

<400> 3525

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His
115 120 125

His

<210> 3526
<211> 119
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L2 1417

<400> 3526

Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu Gln Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn
20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Ala Ser
35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly
50 55 60

Arg Ala Leu Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln
65 70 75 80

Tyr Arg Cys Ile Ile Ile Tyr Gly Asp Ala Trp Asp Tyr Lys Tyr Leu
85 90 95

Thr Leu Lys Val Lys Ala Gly Ser Asp Tyr Lys Asp Asp Asp Lys Gly
100 105 110

Ser His His His His His His
115

<210> 3527
<211> 136
<212> PRT
<213> Artificial sequence

<220>
<223> ICOSL 2266

<400> 3527

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 25 30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
35 40 45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
50 55 60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65 70 75 80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
85 90 95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
100 105 110

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp Asp Asp
        115                 120                 125


Asp Lys His His His His His His
    130                 135


<210>  3528
<211>  136
<212>  PRT
<213>  Artificial sequence

<220>
<223>  ICOSL 2264

<400>  3528

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1               5                   10                  15


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30


Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45


Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60


Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80


Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95


Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110
```

```
Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp Asp Asp
        115                 120                 125


Asp Lys His His His His His His
    130                 135


<210>  3529
<211>  364
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CTLA-4 3037 - Fc

<400>  3529

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser
        115                 120                 125
```

```
Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys
    130                 135                 140

Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu
145                 150                 155                 160

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
                165                 170                 175

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
            180                 185                 190

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
        195                 200                 205

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
    210                 215                 220

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
225                 230                 235                 240

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
                245                 250                 255

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
            260                 265                 270

Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
        275                 280                 285

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
    290                 295                 300

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
305                 310                 315                 320
```

```
Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
                325                 330                 335


Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
            340                 345                 350


His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
        355                 360


<210>  3530
<211>  364
<212>  PRT
<213>  Artificial sequence

<220>
<223>  CTLA-4 36 - Fc

<400>  3530

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

```
Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser
        115                 120                 125

Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys
    130                 135                 140

Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu
145                 150                 155                 160

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
                165                 170                 175

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
            180                 185                 190

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
        195                 200                 205

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
    210                 215                 220

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
225                 230                 235                 240

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
                245                 250                 255

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
            260                 265                 270

Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
        275                 280                 285
```

```
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
    290                 295                 300

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
305                 310                 315                 320

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
                325                 330                 335

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
            340                 345                 350

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
        355                 360
```

<210> 3531
<211> 356
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - Fc

<400> 3531

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80
```

```
Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
        115                 120                 125

Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
    130                 135                 140

Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
145                 150                 155                 160

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
                165                 170                 175

Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
            180                 185                 190

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
        195                 200                 205

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
    210                 215                 220

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
225                 230                 235                 240

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
                245                 250                 255

Gln Val Tyr Thr Leu Pro Pro Cys Arg Glu Glu Met Thr Lys Asn Gln
            260                 265                 270
```

```
Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
        275                 280                 285


Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
    290                 295                 300


Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
305                 310                 315                 320


Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
                325                 330                 335


Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
            340                 345                 350


Leu Ser Pro Gly
        355


<210>  3532
<211>  451
<212>  PRT
<213>  Artificial sequence

<220>
<223>  huPDL2-Fc

<400>  3532

Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly Val Ser Ala Leu
1               5                   10                  15


Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser
            20                  25                  30


Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu
        35                  40                  45
```

```
Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser Pro
    50                  55                  60

His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly Lys
65                  70                  75                  80

Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln Tyr
                85                  90                  95

Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu Thr
            100                 105                 110

Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu Lys
        115                 120                 125

Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly Tyr
    130                 135                 140

Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn Thr
145                 150                 155                 160

Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val Leu
                165                 170                 175

Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp Asn
            180                 185                 190

Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser Gln
        195                 200                 205

Met Glu Pro Arg Thr His Pro Thr Ala Ala Ala Glu Pro Lys Ser Ser
    210                 215                 220

Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
225                 230                 235                 240
```

```
Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
                245                 250                 255

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
            260                 265                 270

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
        275                 280                 285

His Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln Tyr Gly Ser Thr Tyr
    290                 295                 300

Arg Cys Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
305                 310                 315                 320

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
                325                 330                 335

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
            340                 345                 350

Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser
        355                 360                 365

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
    370                 375                 380

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
385                 390                 395                 400

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
                405                 410                 415

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
            420                 425                 430
```

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
        435   440   445

Pro Gly Lys
    450

<210> 3533
<211> 243
<212> PRT
<213> Artificial sequence

<220>
<223> Stuffer_AAA_ Knob Fc

<400> 3533

His Met Ser Ser Val Ser Ala Gln Ala Ala Ala Glu Pro Lys Ser Ser
1   5   10   15

Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly
            20   25   30

Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
        35   40   45

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
    50   55   60

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
65   70   75   80

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
                85   90   95

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
            100   105   110

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
        115   120   125

```
Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
    130                 135                 140

Tyr Thr Leu Pro Pro Cys Arg Glu Glu Met Thr Lys Asn Gln Val Ser
145                 150                 155                 160

Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
                165                 170                 175

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
            180                 185                 190

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
        195                 200                 205

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
    210                 215                 220

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
225                 230                 235                 240

Pro Gly Lys
```

<210> 3534
<211> 367
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - Fc

<400> 3534

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15
```

```
Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys
    130                 135                 140

Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro
145                 150                 155                 160

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
                165                 170                 175

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
            180                 185                 190

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
        195                 200                 205
```

```
Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
    210                 215                 220

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
225                 230                 235                 240

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
                245                 250                 255

Gln Pro Arg Glu Pro Gln Val Cys Thr Leu Pro Pro Ser Arg Glu Glu
            260                 265                 270

Met Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr
        275                 280                 285

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
    290                 295                 300

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
305                 310                 315                 320

Leu Val Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
                325                 330                 335

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
            340                 345                 350

Gln Lys Ser Leu Ser Leu Ser Pro Gly His His His His His His
        355                 360                 365
```

<210> 3535
<211> 266
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2244

<400> 3535

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
130 135 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145 150 155 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
165 170 175

Tyr His Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr
180 185 190

```
Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205


Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220


Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240


Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Asp Tyr Lys Asp
                245                 250                 255


Asp Asp Asp Lys His His His His His His
            260                 265
```

<210> 3536
<211> 1476
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L2 31 - Fc

<400> 3536

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atggggtcag ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctgat       60

actcaggaga aggaagtcag agcgatggta ggcagcgacg tggagctcag ctgcgcttgc      120

cctgaaggaa gccgttttga tttaaatgat gtttacgtat attggcaaac cagtgagtcg      180

aaaaccgtgg tgacctacca catcccacag cacagctcct tggaaaacgt ggacagccgc      240

taccggaacc gagccctgat gtcaccggcc ggcatgctgc ggggcgactt ctccctgcgc      300

ttgttcaacg tcacccccca ggacgagcag aagtttcact gcctggtgtt gagccgatcc      360

ctgggattcc aggaggtttt gagcgttgag gttacactgc atgtggcagc aaacttcagc      420

gtgcccgtcg tcagcgcccc ccacagcccc tcccaggatg agctcacctt cacgtgtaca      480

tccataaacg gctaccccag gcccaacgtg tactggatca ataagacgga caacagcctg      540
```

ctggaccagg ctctgcagaa tgacaccgtc ttcttgaaca tgcggggctt gtatgacgtg 600

gtcagcgtgc tgaggatcgc acggaccccc agcgtgaaca ttggctgctg catagagaac 660

gtgcttctgc agcagaacct gactgtcggc agccagacag gaaatgacat cggagagaga 720

gacaagatca cagagaatcc agtcagtacc ggcgagaaaa acgcggccac ggcggccgca 780

gagcccaaat cttctgacaa aactcacaca tgcccaccgt gcccagcacc tgaactcctg 840

gggggaccgt cagtcttcct cttcccccca aaacccaagg acaccctcat gatctcccgg 900

acccctgagg tcacatgcgt ggtggtggac gtgagccacg aagaccctga ggtcaagttc 960

aactggtacg tggacggcgt ggaggtgcat aatgccaaga caaagccgtg cgaggagcag 1020

tacgggagca cgtaccgttg cgtcagcgtc ctcaccgtcc tgcaccagga ctggctgaat 1080

ggcaaggagt acaagtgcaa ggtctccaac aaagccctcc cagccccat cgagaaaacc 1140

atctccaaag ccaaagggca gccccgagaa ccacaggtgt acaccctgcc cccatcccgg 1200

gaggagatga ccaagaacca ggtcagcctg acctgcctgg tcaaaggctt ctatcccagc 1260

gacatcgccg tggagtggga gagcaatggg cagccggaga acaactacaa gaccacgcct 1320

cccgtgctgg actccgacgg ctccttcttc ctctatagca agctcaccgt ggacaagagc 1380

aggtggcagc aggggaacgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac 1440

tacacgcaga agagcctctc cctgtctccg ggtaag 1476

<210> 3537
<211> 473
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L2 31 - Fc

<400> 3537

Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp Val Glu
1 5 10 15

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  25                  30

Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His
        35                  40                  45

Ile Pro Gln His Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn
    50                  55                  60

Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu
65                  70                  75                  80

Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu
                85                  90                  95

Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val
            100                 105                 110

Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser Ala Pro
        115                 120                 125

His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser Ile Asn
    130                 135                 140

Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp Asn Ser
145                 150                 155                 160

Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn Met Arg
                165                 170                 175

Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr Pro Ser
            180                 185                 190

Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln Asn Leu
        195                 200                 205
```

```
Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile
    210                 215                 220

Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr Ala Ala
225                 230                 235                 240

Ala Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro
                245                 250                 255

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
            260                 265                 270

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
        275                 280                 285

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
    290                 295                 300

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Cys Glu Glu
305                 310                 315                 320

Gln Tyr Gly Ser Thr Tyr Arg Cys Val Ser Val Leu Thr Val Leu His
                325                 330                 335

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
            340                 345                 350

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
        355                 360                 365

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
    370                 375                 380

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
385                 390                 395                 400
```

```
Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
                405                 410                 415


Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
            420                 425                 430


Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
        435                 440                 445


Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
    450                 455                 460


Lys Ser Leu Ser Leu Ser Pro Gly Lys
465                 470


<210>  3538
<211>  231
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Fc

<400>  3538

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1               5                   10                  15


Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            20                  25                  30


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        35                  40                  45


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    50                  55                  60


Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65                  70                  75                  80
```

```
Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                85                  90                  95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            100                 105                 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        115                 120                 125

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
    130                 135                 140

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
145                 150                 155                 160

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
            180                 185                 190

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
        195                 200                 205

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
    210                 215                 220

Ser Leu Ser Leu Ser Pro Gly
225                 230
```

<210> 3539
<211> 1125
<212> DNA
<213> Artificial sequence

<220>

<223> PD-L1 303 - Fc

<400> 3539
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctttt 60

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggatccgg agggtctggg 420

ggaggcggtt ctgagcccaa atcttctgac aaaactcaca catgcccccc ttgtccagcg 480

cctgaactcc tgggtggacc ctctgtcttc cttttccccc ctaagccgaa agataccctg 540

atgatctccc gcactcccga agtcacatgt gttgttgtcg acgtatctca tgaagatcct 600

gaggtgaaat tcaactggta tgtagacggg gtcgaagttc ataatgctaa gactaagcca 660

cgagaagagc aatacaactc aacgtatcgg gtggtgagcg ttctgacggt tctgcaccaa 720

gattggctta atggaaaaga gtataagtgc aaggtgtcca acaaggctct tccggcaccc 780

atcgaaaaga cgatttccaa agcgaaaggc caacctaggg aaccgcaagt ttacactttg 840

cccccgtcaa gagacgaact taccaagaat caagtttccc tgacgtgcct tgtgaagggc 900

ttctacccta gcgatatagc agttgagtgg gaatctaacg gccagcccga aaataattat 960

aagactactc cgcccgtgct ggacagtgat ggttcatttt tcctgtattc aaaactcact 1020

gtggacaaat ctagatggca gcagggtaat gtgttctctt gttcagttat gcacgaggca 1080

ttgcacaatc actatacgca aaaaagtttg tctctctctc cgggg 1125

<210> 3540
<211> 356
<212> PRT
<213> Artificial sequence

<220>

<223> PD-L1 303 - Fc

<400> 3540

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                  10                  15


Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30


Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45


Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60


Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80


Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95


Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys
        115                 120                 125


Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
    130                 135                 140


Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
145                 150                 155                 160


Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
                165                 170                 175
```

```
Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
            180                 185                 190

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
        195                 200                 205

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
    210                 215                 220

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
225                 230                 235                 240

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
                245                 250                 255

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
            260                 265                 270

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
        275                 280                 285

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
    290                 295                 300

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
305                 310                 315                 320

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
                325                 330                 335

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
            340                 345                 350

Leu Ser Pro Gly
        355
```

<210> 3541
<211> 1558
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 - PD-L1 303 - Fc

<400> 3541
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actgttacgg tacccaaaga cctgtacgta gtggagtacg ggtccaatat gaccatagaa 120

tgcaaattcc ccgtcgagaa gcaattggat ctcgccgctc tgatcgtcta ctgggagatg 180

gagggcaaag atatcattca attcgtacac ggggaagaag atcagaaagc tcaacacagc 240

tcttacaggc aacgggcgag actgctcaag gaccaattga gtcttggaaa cgctgcactt 300

cagatcaccg acgtgaagtt gcaggatgca ggcgtgtatc ggtgcatgat aagctatgga 360

ggaggggcag attataaaag gattacggtg aaggtaaacg caggtggcgg aggttctggc 420

ggaggtggaa gtggcggagg tggctctttc acagtaacgg tccctaaaga tctctatgtc 480

gtggaatacg ggagcaacat gacaattgag tgcaagtttc cagtagaaaa gcaacttgat 540

ctggccgcgt tgatagtcta ctgggagatg gaaggtaagg acatcattca gtttgtacat 600

ggagaggaag accaaaaggc tcagcatagt tcctatcggc agagggcgag attgcttaaa 660

gaccagctct ccttgggaaa tgcagctctc cagattacgg atgtgaaatt gcaagatgct 720

ggcgtataca gatgtatgat tagctatgga ggaggtgcgg actataagag aatcacggtc 780

aaagttaatg ccgggtctgg gggaggcggt tctgagccca aatcttctga caaaactcac 840

acatgccccc cttgtccagc gcctgaactc ctgggtggac cctctgtctt ccttttcccc 900

cctaagccga aagataccct gatgatctcc cgcactcccg aagtcacatg tgttgttgtc 960

gacgtatctc atgaagatcc tgaggtgaaa ttcaactggt atgtagacgg ggtcgaagtt 1020

cataatgcta agactaagcc acgagaagag caatacaact caacgtatcg ggtggtgagc 1080

gttctgacgg ttctgcacca agattggctt aatggaaaag agtataagtg caaggtgtcc 1140

aacaaggctc ttccggcacc catcgaaaag acgatttcca aagcgaaagg ccaacctagg 1200

gaaccgcaag tttacacttt gcccccgtca agagacgaac ttaccaagaa tcaagtttcc 1260

ctgacgtgcc ttgtgaaggg cttctaccct agcgatatag cagttgagtg ggaatctaac 1320

ggccagcccg aaaataatta taagactact ccgcccgtgc tggacagtga tggttcattt 1380

ttcctgtatt caaaactcac tgtggacaaa tctagatggc agcagggtaa tgtgttctct 1440

tgttcagtta tgcacgaggc attgcacaat cactatacgc aaaaaagttt gtctctctct 1500

ccggggtaag atatctcgac aatcaacctc tggattacaa aatttgtgaa agattgac 1558

<210> 3542
<211> 483
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - PD-L1 303 - Fc

<400> 3542

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

```
Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr
    130                 135                 140

Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu
145                 150                 155                 160

Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile
                165                 170                 175

Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser
            180                 185                 190

Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
        195                 200                 205

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
    210                 215                 220

Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr
225                 230                 235                 240

Val Lys Val Asn Ala Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser
                245                 250                 255

Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
            260                 265                 270

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
        275                 280                 285
```

```
Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
    290                 295                 300

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
305                 310                 315                 320

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
                325                 330                 335

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
            340                 345                 350

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
        355                 360                 365

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
    370                 375                 380

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
385                 390                 395                 400

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
                405                 410                 415

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
            420                 425                 430

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
        435                 440                 445

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
    450                 455                 460

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
465                 470                 475                 480
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Ser Pro Gly

<210> 3543
<211> 798
<212> DNA
<213> artificial sequence

<220>
<223> PD-L1 303 ICOSL 2264

<400> 3543
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gaatgcaagt tccccgtaga gaagcagctc gatttggccg ctttgatagt gtactgggaa 120

atggaaggaa aagacatcat tcaattcgtc cacggtgaag aggatcaaaa agcgcaacat 180

agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 240

ctgcagatta ccgacgtaaa acttcaagac gcgggagttt atcgctgcat gatttcctac 300

gggggtggcg cagactataa aaggatcact gtaaaggtaa acgccggatc cggagggtct 360

gggggaggcg gttctggggg tggaggctca gatactcagg agaaggaagt cagagcgatg 420

gtaggcagcg acgtggagct cagctgcgct tgccctgaag gaagccgttt tgatttaaat 480

gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

cagcacagct ccttggaata tgtggacagc cgctaccgga accgagccct gatgtcaccg 600

gccggcatgc tgcggggcga cttctccctg cgcttgttca acgtcacccc ccaggacgag 660

cagaagtttc actgcctggt gttgagcaga tccctgggat tccaggaggt tttgagcgtt 720

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<223> PD-L1 303 ICOSL 2266

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agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 240

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gggggtggcg cagactataa aaggatcact gtaaaggtaa acgccggatc cggagggtct 360

gggggaggcg gttctggggg tggaggctca gatactcagg agaaggaagt cagagcgatg 420

gtaggcagcg acgtggagct cagctgcgct tgccctgaag gaagccgttt tgatttaaat 480

gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

cagcacagct ccttggaaaa cgtggacagc cgctaccgga accgagccct gatgtcaccg 600

gccggcatgc tgcggggcga cttctccctg cgcttgttca acgtcacccc ccaggacgag 660

cagaagtttc actgcctggt gttgagcaga tccctgggat tccaggaggt tttgagcgtt 720

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aaagctggat ccggagggtc tgggggaggc ggttctgggg gtggaggctc agatactcag 360

gagaaggaag tcagagcgat ggtaggcagc gacgtggagc tcagctgcgc ttgccctgaa 420

ggaagccgtt ttgatttaaa tgatgtttac gtatattggc aaaccagtga gtcgaaaacc 480

gtggtgacct accacatccc acagcacagc tccttggaaa acgtggacag ccgctaccgg 540

aaccgagccc tgatgtcacc ggccggcatg ctgcggggcg acttctccct gcgcttgttc 600

aacgtcaccc cccaggacga gcagaagttt cactgcctgg tgttgagcag atccctggga 660

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caaaaagttg aaaacgacgc gtccccccat agggaaaggg cgacccttct ggaggagcag 180

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taccgctgca tcataattta cggggacgcg tgggactaca agtacttgac tctcaaagtt 300

aaagctggat ccggagggtc tgggggaggc ggttctgggg gtggaggctc agatactcag 360

gagaaggaag tcagagcgat ggtaggcagc gacgtggagc tcagctgcgc ttgccctgaa 420

ggaagccgtt ttgatttaaa tgatgtttac gtatattggc aaaccagtga gtcgaaaacc 480

gtggtgacct accacatccc acagcacagc tccttggaat atgtggacag ccgctaccgg 540

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aacgtcaccc cccaggacga gcagaagttt cactgcctgg tgttgagcag atccctggga 660

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<210> 3547
<211> 1599
<212> DNA
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<220>
<223> PD-L1 303 PD-L1 303 ICOSL 2264 ICOSL 2264

<400> 3547
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gtggttgagt acgggagcaa tatgacgatt gaatgcaagt tccccgtaga gaagcagctc 480

gatttggccg ctttgatagt gtactgggaa atggaaggaa aagacatcat tcaattcgtc 540

cacggtgaag aggatcaaaa agcgcaacat agctcctata gacaacgcgc acgcttgctt 600

aaagaccagc tgagtcttgg taacgcggcg ctgcagatta ccgacgtaaa acttcaagac 660

gcgggagttt atcgctgcat gatttcctac gggggtggcg cagactataa aaggatcact 720

gtaaaggtaa acgccggtgg aggtggctct ggaggtggtg gaagcggtgg cggtggtagc 780

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<211> 1188
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 ICOSL 2264 PD-L1 303

<400> 3548
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gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

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tatcgctgca tgatttccta cgggggtggc gcagactata aaaggatcac tgtaaaggta 1140

aacgccgatt acaaggatga cgacgataag caccatcatc accatcac 1188

<210> 3549
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<223> PD-L1 303 ICOSL 2264 ICOSL 2264 PD-L1 303

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tcttcatata ggcagagggc acgcctgctg aaagatcaac ttagtctggg taatgcagcc 240

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gtaggcagcg acgtggagct cagctgcgct tgccctgaag gaagccgttt tgatttaaat 480

gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

cagcacagct ccttggaata tgtggacagc cgctaccgga accgagccct gatgtcaccg 600

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atgatttcct acgggggtgg cgcagactat aaaaggatca ctgtaaaggt aaacgccgat 1560

tacaaggatg acgacgataa gcaccatcat caccatcac 1599

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<211> 567
<212> DNA
<213> Artificial sequence

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<223> PD-L1 303 COMP

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gacgataagc accatcatca ccatcac 567

<210> 3551
<211> 978
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 ICOSL 2264 COMP

<400> 3551
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gtaggcagcg acgtggagct cagctgcgct tgccctgaag gaagccgttt tgatttaaat 480

gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

cagcacagct ccttggaata tgtggacagc cgctaccgga accgagccct gatgtcaccg 600

gccggcatgc tgcggggcga cttctccctg cgcttgttca acgtcacccc ccaggacgag 660

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aatgccgctt tgcaagacgt tagagagctt ctgagacaac aagtgcgcga gatcacgttc 900

ttgaagaaca cagttatgga atgcgacgct tgcggcgatt acaaggatga cgacgataag 960

caccatcatc accatcac 978

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<211> 531
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 VASP

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atggagggca aagatatcat tcaattcgta cacggggaag aagatcagaa agctcaacac 180

agctcttaca ggcaacgggc gagactgctc aaggaccaat tgagtcttgg aaacgctgca 240

cttcagatca ccgacgtgaa gttgcaggat gcaggcgtgt atcggtgcat gataagctat 300

ggaggagggg cagattataa aaggattacg gtgaaggtaa acgcaggtgg cggaggttct 360

ggcggaggtg gaagtggcgg aggtggctct gatctccaga gggtcaaaca agagctgctt 420

gaagaggtga aaaaggagct tcagaaggtt aaagaagaaa ttatagaggc attcgttcaa 480

gaattgagag actataaaga tgacgacgac aaacaccatc atcaccatca c 531

<210> 3553
<211> 942
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 ICOSL 2264 VASP

<400> 3553
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atggagggca aagatatcat tcaattcgta cacggggaag aagatcagaa agctcaacac 180

agctcttaca ggcaacgggc gagactgctc aaggaccaat tgagtcttgg aaacgctgca 240

cttcagatca ccgacgtgaa gttgcaggat gcaggcgtgt atcggtgcat gataagctat 300

ggaggagggg cagattataa aaggattacg gtgaaggtaa acgcaggtgg cggaggttct 360

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gtaggcagcg acgtggagct cagctgcgct tgccctgaag gaagccgttt tgatttaaat 480

gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

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gccggcatgc tgcggggcga cttctccctg cgcttgttca acgtcacccc ccaggacgag 660

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ggttcaggag gcggcggctc tgatctccag agggtcaaac aagagctgct tgaagaggtg 840

aaaaaggagc ttcagaaggt taaagaagaa attatagagg cattcgttca agaattgaga 900

gactataaag atgacgacga caaacaccat catcaccatc ac 942

<210> 3554
<211> 525
<212> DNA
<213> Artificial sequence

<220>

<223> ZZ12.6 PD-L1 303

<400> 3554
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gaatgcaagt tccccgtaga gaagcagctc gatttggccg ctttgatagt gtactgggaa 300

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agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 420

ctgcagatta ccgacgtaaa acttcaagac gcgggagttt atcgctgcat gatttcctac 480

gggggtggcg cagactataa aaggatcact gtaaaggtaa acgcc 525

<210> 3555
<211> 552
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 ZZ12.6

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ggaggagggg cagattataa aaggattacg gtgaaggtaa acgcaggtgg cggaggttct 360

ggcggaggtg gaagtggcgg aggtggctct gacgtccagg cgatctcctc caccatccag 420

gaccttcagg accaggtcga ctccctggcg gaggtggtgc tgcagaatcg ccgcggcctt 480

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catcaccatc ac 552

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<211> 1488
<212> DNA
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<220>
<223> PD-L1 303 ICOSL 2266 Fc

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gggggtggcg cagactataa aaggatcact gtaaaggtaa acgccggatc cggagggtct 360

gggggaggcg gttctggggg tggaggctca gatactcagg agaaggaagt cagagcgatg 420

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gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

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gccggcatgc tgcggggcga cttctccctg cgcttgttca acgtcacccc ccaggacgag 660

cagaagtttc actgcctggt gttgagcaga tccctgggat tccaggaggt tttgagcgtt 720

gaggttacac tgcatgtggc agcaaacttc agcgtgggtg gaggagggtc aggatccggg 780

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cctgaagctg agggtgcgcc ctctgtcttc cttttccccc ctaagccgaa agataccctg 900

atgatctccc gcactcccga agtcacatgt gttgttgtcg acgtatctca tgaagatcct 960

gaggtgaaat tcaactggta tgtagacggg gtcgaagttc ataatgctaa gactaagcca 1020

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gacgtatctc atgaagatcc tgaggtgaaa ttcaactggt atgtagacgg ggtcgaagtt 240

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ctgtcttgcg cagtgaaggg cttctaccct agcgatatag cagttgagtg ggaatctaac 540

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<220>
<223> PD-L1 303 ICOSL 2264 Fc

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<223> PD-L1 303 ICOSL 2266 Fc

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<223> PD-L1 303 CTLA-4 3495 Fc

<400> 3561

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atggaaggaa aagacatcat tcaattcgtc cacggtgaag aggatcaaaa agcgcaacat 180

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gcgaccgagg tcagagttac tgtactgaga caagctgatt cacaagtgac tgaggtctgc 540

gctgctactt atatgatggg gagcgagctg actttccctg atgactcaat ctgtaccggc 600

accagcagtg ggaaccaagt aaatcttact attcgaggac tgagggcaat ggacacggga 660

ctttacattt gtaaggtcga gcagatgtac ccgccacctt acctcctcgg aatcggtaat 720

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<220>
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atggaaggaa aagacatcat tcaattcgtc cacggtgaag aggatcaaaa agcgcaacat 180

agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 240

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atttgtaagg tcgagcagat gtacccgcca ccttacctcc tcggaatcgg taatggtacg 1440

caaatttatg ttatagatcc tgaaccgtgc cccgattccg ac 1482

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<211> 387
<212> DNA
<213> Artificial sequence

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<223> PD-L1 303

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atggaaggaa aagacatcat tcaattcgtc cacggtgaag aggatcaaaa agcgcaacat 180

agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 240

ctgcagatta ccgacgtaaa acttcaagac gcgggagttt atcgctgcat gatttcctac 300

gggggtggcg cagactataa aaggatcact gtaaaggtaa acgccgatta caaggatgac 360

gacgataagc accatcatca ccatcac 387

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<212> DNA
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<220>
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ctgcccctag ggagggcctt attccacata cctcaagtcc aagtgaggga cgaaggacag 240

tacaggtgca taatcatcta tggggacgcc tgggactaca agtacctgac tctgaaagtc 300

aaagctggat cagattacaa ggatgacgac gataagggat ctcaccatca tcaccatcac 360

<210> 3570
<211> 408
<212> DNA
<213> Artificial sequence

<220>
<223> ICOSL 2266

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tcgaaaaccg tggtgaccta ccacatccca cagcacagct ccttggaaaa cgtggacagc 180

cgctaccgga accgagccct gatgtcaccg gccggcatgc tgcggggcga cttctccctg 240

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agcgtggatt acaaggatga cgacgataag caccatcatc accatcac 408

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<212> DNA
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<220>
<223> ICOSL 2264

<400> 3571
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tcgaaaaccg tggtgaccta ccacatccca cagcacagct ccttggaata cgtggacagc 180

cgctaccgga accgagccct gatgtcaccg gccggcatgc tgcggggcga cttctccctg 240

cgcttgttca acgtcacccc ccaggacgag cagaagtttc actgcctggt gttgagccga 300

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<210> 3572
<211> 1092
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<220>
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caagctgatt cacaagtgac tgaggtctgc gctgctactt atatgatggg gagcgagctg 180

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<220>
<223> CTLA-4 36 Fc

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<211> 1059
<212> DNA
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<220>
<223> huPDL2-Fc

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gatgtttacg tatattggca aaccagtgag tcgaaaaccg tggtgaccta ccacatccca 540

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<212> PRT
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<223> Fc (C220S/L234A/L235E/G237A/E356D/M358L)

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Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
35 40 45

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
50 55 60

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
65 70 75 80

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
85 90 95

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
100 105 110

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
115 120 125

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Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
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Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                165                 170                 175

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
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Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
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Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               5                   10                  15

Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile Tyr Trp
            20                  25                  30
```

Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp Met Asn
35 40 45

Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr Asn Asn
50 55 60

Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly Thr Tyr
65 70 75 80

Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg Glu His
85 90 95

Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp
100 105

<210> 3581
<211> 1062
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L2 1417_GSGGS_2xG4S_ Hole Fc_His

<400> 3581
ttattcacag tgactgttcc gaaagagttg tatataatcg agcaagggag taatgttacc 60

ctggaatgca attttgacac cgggtcacac gtcaacctcg gagcgattac tgcttctttg 120

caaaaagttg aaaacgacgc gtccccccat agggaaaggg cgacccttct ggaggagcag 180

ttgccccttg gcagggcact ctttcacatt ccccaggtgc aagtcaggga cgaggggcaa 240

taccgctgca tcataattta cggggacgcg tgggactaca agtacttgac tctcaaagtt 300

aaagctggat ccggagggtc tgggggaggc ggttctgggg gtggaggctc agagcccaaa 360

agctccgaca agactcacac atgcccccct tgtccagcgc ctgaagctga gggtgcgccc 420

tctgtcttcc ttttcccccc taagccgaaa gataccctga tgatctcccg cactcccgaa 480

gtcacatgtg ttgttgtcga cgtatctcat gaagatcctg aggtgaaatt caactggtat 540

gtagacgggg tcgaagttca taatgctaag actaagccac gagaagagca atacaactca 600

acgtatcggg tggtgagcgt tctgacggtt ctgcaccaag attggcttaa tggaaaagag 660

tataagtgca aggtgtccaa caaggctctt ccggcaccca tcgaaaagac gatttccaaa 720

gcgaaaggcc aacctaggga accgcaagtt tgcactttgc ccccgtcaag agaagaaatg 780

accaagaatc aagtttccct gtcttgcgca gtgaagggct tctaccctag cgatatagca 840

gttgagtggg aatctaacgg ccagcccgaa aataattata agactactcc gcccgtgctg 900

gacagtgatg gttcattttt cctggtttca aaactcactg tggacaaatc tagatggcag 960

cagggtaatg tgttctcttg ttcagttatg cacgaggcat tgcacaatca ctatacgcaa 1020

aaaagtttgt ctctctctcc ggggcaccat catcaccatc ac 1062

<210> 3582
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> T89A/L98Q/M99L/Y105L/L106I/Y115N/E120D/C122P/D124P/S125I/D126P ECD

<400> 3582

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

```
Ile Gln Gly Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Ile Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Asn Val Ile Asp Pro Asp Pro Pro Pro Pro Ile Pro
        115                 120                 125


<210>  3583
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  N58S/L63P/T71A/S72G/L98Q/M99L/Y105L/D124I/S125P/D126T ECD

<400>  3583

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Ala Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
```

100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Ile Pro Thr
115 120 125

<210> 3584
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> R16G/E33M/N58S/E59G/L63P/L98Q/Y105L/E120D/C122P/D124P/S125I/D126P ECD

<400> 3584

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Gly
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Met Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Gly Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Asp Pro Pro Pro Pro Ile Pro
115 120 125

<210> 3585
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> G29W/L63P/S72G/L98Q/Y105L/P121S/D126T ECD

<400> 3585

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Ser Cys Pro Asp Ser Thr
        115   120   125

<210> 3586
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> L12H/E33M/L98Q/Y105L ECD

<400> 3586

Lys Ala Met His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Met Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3587
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/L63P/M87V/L98Q/Y105L ECD

<400> 3587

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3588
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  I18T/A26T/M55T/M56K/L63P/L98Q/M99L/Y105L ECD

<400>  3588

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Thr Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30
```

```
Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Thr Lys Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3589
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  I18T/A26T/M56K/L63P/L98Q/Y105L ECD

<400>  3589

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Thr Ala Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45
```

```
Val Cys Ala Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3590
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/L63P/L98Q ECD

<400> 3590

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

```
Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3591
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/L63P/Y105L ECD

<400>  3591

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

Glu Leu Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3592
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/L63P/M87V/L98Q ECD

<400> 3592

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3593
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/L63P/M87V/Y105L ECD

<400> 3593

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Leu Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3594
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/L63P/L98Q/Y105L ECD

<400> 3594

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3595
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/M87V/L98Q/Y105L ECD

<400> 3595

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3596
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/M56K/L63P/M87V/L98Q/Y105L ECD

<400>  3596

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30
```

```
Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3597
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/N58S/L63P/M87V/L98Q/Y105L ECD

<400>  3597

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45
```

```
Val Cys Ala Ala Ser Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3598
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> M56K/N58S/L63P/M87V/L98Q/Y105L ECD

<400> 3598

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

```
Ile Gln Gly Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3599
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  E33V/L98Q/Y105L ECD

<400>  3599

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Val Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3600
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> E33V/M99L/Y105L ECD

<400> 3600

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

Val Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Leu Leu Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3601
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> E33V/L98Q/M99L ECD

<400> 3601

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Val Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Leu Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3602
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> E33V/M99L ECD

<400> 3602

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Val Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Leu Leu Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3603
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> L12F/R16H/G29W/M56T/L98Q ECD

<400> 3603

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3604
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  L12F/R16H/G29W/M56T/Y105L ECD

<400>  3604

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30
```

```
Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Leu Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3605
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  L12F/R16H/G29W/L98Q/Y105L ECD

<400>  3605

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45
```

```
Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3606
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> L12F/R16H/M56T/L98Q/Y105L ECD

<400> 3606

```
Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

```
Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3607
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  G29W/M56T/L98Q/Y105L ECD

<400>  3607

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95
```

```
Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3608
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  L12F/G29W/L98Q/Y105L ECD

<400>  3608

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg
1               5                   10                  15


Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60


Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125
```

<210> 3609
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> L12F/L98Q/Y105L ECD

<400> 3609

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3610
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> R16H/L98Q/Y105L ECD

<400> 3610

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser His
1   5   10   15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20   25   30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35   40   45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
    50   55   60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65   70   75   80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85   90   95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100   105   110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115   120   125

<210> 3611
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> G29W/L98Q/Y105L ECD

<400> 3611

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
115 120 125

<210> 3612
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> M56T/L98Q/Y105L ECD

<400> 3612

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
20 25 30

```
Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3613
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  L12F/R16H/G29W/M56T/S72G/L98Q/Y105L ECD

<400>  3613

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45
```

```
Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3614
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  G29W/M56T/S72G/L98Q/Y105L ECD

<400>  3614

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
            20                  25                  30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80
```

```
Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3615
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T89A/L98Q/M99L/Y105L/L106I/Y115N/E120D/C122P/D124P/S125I/D126P
       IgV domain

<400>  3615

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Ala Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3616
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> N58S/L63P/T71A/S72G/L98Q/M99L/Y105L/D124I/S125P/D126T IgV domain

<400> 3616

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Ala Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3617
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> R16G/E33M/N58S/E59G/L63P/L98Q/Y105L/E120D/C122P/D124P/S125I/D126P IgV

<400> 3617

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Gly Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Met Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Ser Gly Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3618
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> G29W/L63P/S72G/L98Q/Y105L/P121S/D126T IgV domain

<400> 3618

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3619
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  L12H/E33M/L98Q/Y105L IgV domain

<400>  3619

His Val Ala Gln Pro Ala Val Val His Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Met Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3620
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/M56K/N58S/L63P/M87V/L98Q/Y105L IgV domain

<400>  3620

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3621
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> I18T/A26T/M55T/M56K/L63P/L98Q/ M99L/Y105L IgV domain

<400> 3621

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Thr Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3622
<211> 102
<212> PRT
<213> Artificial sequence

<220>

<223> I18T/A26T/M56K/L63P/L98Q/Y105L IgV domain

<400> 3622

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Thr Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3623
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/L63P/L98Q IgV domain

<400> 3623

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100


<210>  3624
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/L63P/Y105L IgV domain

<400>  3624

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Met Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60
```

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3625
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/M56K/N58S/L63P/M87V/L98Q IgV domain

<400>  3625

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Tyr
            100
```

<210> 3626
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/L63P/M87V/Y105L IgV domain

<400> 3626

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3627
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/L63P/L98Q/Y105L IgV domain

<400> 3627

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3628
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> T53S/M56K/N58S/M87V/L98Q/Y105L IgV domain

<400> 3628

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Ser Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3629
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/M56K/L63P/M87V/L98Q/Y105L IgV domain

<400>  3629

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Lys Gly Asn Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

```
Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100



<210>  3630
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  T53S/N58S/L63P/M87V/L98Q/Y105L IgV domain

<400>  3630

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Ser Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3631
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> M56K/N58S/L63P/M87V/L98Q/Y105L IgV domain

<400> 3631

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Lys Gly Ser Glu Leu Thr Phe Pro Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Val Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3632
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> E33V/L98Q/Y105L IgV domain

<400> 3632

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Val Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3633
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  E33V/M99L/Y105L IgV domain

<400>  3633

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Val Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3634
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  E33V/L98Q/M99L  IgV domain

<400>  3634

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Val Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80
```

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3635
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> E33V/M99L IgV domain

<400> 3635

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Val Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Leu
85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3636
<211> 102

<212> PRT
<213> Artificial sequence

<220>
<223> L12F/R16H/G29W/M56T/L98Q IgV domain

<400> 3636

His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Tyr
100

<210> 3637
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> L12F/R16H/G29W/M56T/Y105L IgV domain

<400> 3637

His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala
1 5 10 15

```
Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45

Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met
                85                  90                  95

Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3638
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> L12F/R16H/G29W/L98Q/Y105L IgV domain

<400> 3638

```
His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala
1               5                   10                  15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45
```

```
Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3639
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  L12F/R16H/M56T/L98Q/Y105L IgV domain

<400>  3639

His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3640
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> G29W/M56T/L98Q/Y105L IgV domain

<400> 3640

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3641
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> L12F/G29W/L98Q/Y105L IgV domain

<400> 3641

His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3642
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> L12F/L98Q/Y105L IgV domain

<400> 3642

His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser Arg Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50   55   60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65   70   75   80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85   90   95

Tyr Pro Pro Pro Tyr Leu
            100

<210> 3643
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> R16H/L98Q/Y105L IgV domain

<400> 3643

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser His Gly Ile Ala
1   5   10   15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20   25   30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35   40   45

Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50   55   60

```
Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3644
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  G29W/L98Q/Y105L IgV domain

<400>  3644

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95
```

Tyr Pro Pro Pro Tyr Leu
100

<210> 3645
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> M56T/L98Q/Y105L IgV domain

<400> 3645

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1 5 10 15

Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
20 25 30

Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
35 40 45

Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
50 55 60

Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65 70 75 80

Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
85 90 95

Tyr Pro Pro Pro Tyr Leu
100

<210> 3646
<211> 102
<212> PRT
<213> Artificial sequence

<220>

<223> L12F/R16H/G29W/M56T/S72G/L98Q/Y105L IgV domain

<400> 3646

```
His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100
```

<210> 3647
<211> 102
<212> PRT
<213> Artificial sequence

<220>
<223> G29W/M56T/S72G/L98Q/Y105L IgV domain

<400> 3647

```
His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Ile Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg
            20                  25                  30
```

```
Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met
                85                  90                  95


Tyr Pro Pro Pro Tyr Leu
            100


<210>  3648
<211>  126
<212>  PRT
<213>  Artificial sequence

<220>
<223>  I18T, T61R, L63P, S72G, L98Q, M99L, P102L, Y105L ECD

<400>  3648

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1               5                   10                  15


Gly Thr Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr
            20                  25                  30


Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45


Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Arg Phe Pro Asp
    50                  55                  60
```

```
Asp Ser Ile Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80


Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95


Glu Gln Leu Tyr Pro Leu Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110


Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
        115                 120                 125


<210>  3649
<211>  102
<212>  PRT
<213>  Artificial sequence

<220>
<223>  I18T, T61R, L63P, S72G, L98Q, M99L, P102L, Y105L IgV domain

<400>  3649

His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg Gly Thr Ala
1               5                   10                  15


Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg
            20                  25                  30


Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala
        35                  40                  45


Ala Thr Tyr Met Met Gly Asn Glu Leu Arg Phe Pro Asp Asp Ser Ile
    50                  55                  60


Cys Thr Gly Thr Gly Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly
65                  70                  75                  80


Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Leu
                85                  90                  95
```

Tyr Pro Leu Pro Tyr Leu
100

<210> 3650
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(94)
<223> CD58 wild type

<400> 3650

Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val
1 5 10 15

Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp
20 25 30

Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe
35 40 45

Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr
50 55 60

Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn
65 70 75 80

Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser
85 90

<210> 3651
<211> 1560
<212> DNA
<213> Artificial sequence

<220>
<223> CTLA4 3060 - CD155 665 - Fc

<400> 3651
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctaaa 60

gcgatgcacg tcgcccagcc tgctgtcgta ttcgccagct cacacggcat cgcaagtttc 120

gtatgcgaat atgcctctcc atggaaagcg accgaggtca gagttactgt actgagacaa 180

gctgattcac aagtgactga ggtctgcgct gctacttata tgacggggaa cgagctgact 240

ttccttgatg actcaatctg taccggcacc agcagtggga accaagtaaa tcttactatt 300

caaggactga gggcaatgga cacgggactt tacatttgta aggtcgagca gatgtacccg 360

ccaccttacc tcctcggaat cggtaatggt acgcaaattt atgttataga tcctgaaccg 420

tgccccgatt ccgacggagg tggtggatca ggtggaggag gttccggagg aggtggatct 480

tggccacccc caggaaccgg ggacgtcgtc gtgcaggcgc ccacccaggt gtccggcttc 540

ttgggcgact ccgtgacgct gccctgctac ctacaggtgc ccaacatgga ggtgacgcat 600

gtgtcacagc tgacttgggc gcggcatggt gaatctggca gcatggccgt cttccaccaa 660

acgcagggcc cctggtatgc ggagtccaaa cggctggaat tcgtggcagc cagactgggc 720

gcggagctgc ggaatgcctc gctgagggtg ttcgggttgc gcgcagagga tgaaggcaac 780

tacacctgcc agttcgtcac gttcccgcag cgcagcagga gcgtggatat ctggctccga 840

gtgcttggat ccggtggagg agggtcagag cccaaaagct ccgacaagac tcacacatgc 900

ccccccttgtc cagcgcctga agctgagggt gcgccctctg tcttcctttt ccccccctaag 960

ccgaaagata ccctgatgat ctcccgcact cccgaagtca catgtgttgt tgtcgacgta 1020

tctcatgaag atcctgaggt gaaattcaac tggtatgtag acggggtcga agttcataat 1080

gctaagacta agccacgaga agagcaatac aactcaacgt atcgggtggt gagcgttctg 1140

acggttctgc accaagattg gcttaatgga aaagagtata agtgcaaggt gtccaacaag 1200

gctcttccgg cacccatcga aaagacgatt tccaaagcga aaggccaacc tagggaaccg 1260

caagtttaca ctttgccccc gtcaagagac gaacttacca agaatcaagt ttccctgacg 1320

tgccttgtga agggcttcta ccctagcgat atagcagttg agtgggaatc taacggccag 1380

cccgaaaata attataagac tactccgccc gtgctggaca gtgatggttc atttttcctg 1440

tattcaaaac tcactgtgga caaatctaga tggcagcagg gtaatgtgtt ctcttgttca 1500

gttatgcacg aggcattgca caatcactat acgcaaaaaa gtttgtctct ctctccgggg 1560

<210> 3652
<211> 501
<212> PRT
<213> Artificial sequence

<220>
<223> CTLA4 3060 - CD155 665 - Fc

<400> 3652

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Gly

```
        115                 120                 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Trp Pro Pro
    130                 135                 140

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
145                 150                 155                 160

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
                165                 170                 175

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
            180                 185                 190

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Trp Tyr Ala
        195                 200                 205

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
    210                 215                 220

Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu Asp Glu Gly
225                 230                 235                 240

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
                245                 250                 255

Asp Ile Trp Leu Arg Val Leu Gly Ser Gly Gly Gly Gly Ser Glu Pro
            260                 265                 270

Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
        275                 280                 285

Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
    290                 295                 300

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
```

```
305                 310                 315                 320

Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
                325                 330                 335

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
            340                 345                 350

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
        355                 360                 365

Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
    370                 375                 380

Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
385                 390                 395                 400

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
                405                 410                 415

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
            420                 425                 430

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
        435                 440                 445

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
    450                 455                 460

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
465                 470                 475                 480

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
                485                 490                 495

Ser Leu Ser Pro Gly
```

500

<210> 3653
<211> 1560
<212> DNA
<213> Artificial sequence

<220>
<223> CD155 665 - CTLA4 3037 - Fc

<400> 3653
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ccacccccag gaaccgggga cgtcgtcgtg caggcgccca cccaggtgtc cggcttcttg 120

ggcgactccg tgacgctgcc ctgctaccta caggtgccca acatggaggt gacgcatgtg 180

tcacagctga cttgggcgcg gcatggtgaa tctggcagca tggccgtctt ccaccaaacg 240

cagggcccct ggtatgcgga gtccaaacgg ctggaattcg tggcagccag actgggcgcg 300

gagctgcgga atgcctcgct gagggtgttc gggttgcgcg cagaggatga aggcaactac 360

acctgccagt tcgtcacgtt cccgcagcgc agcaggagcg tggatatctg gctccgagtg 420

cttggaggtg gtggatcagg tggaggaggt tccggaggag gtggatctaa agcgatgcac 480

gtcgcccagc ctgctgtcgt attcgccagc tcacacggca tcgcaagttt cgtatgcgaa 540

tatgcctctc catggaaagc gaccgaggtc agagttactg tactgagaca agctgattca 600

caagtgactg aggtctgcgc tgctacttat atgacgggga acgagctgac tttccttgat 660

gactcaatct gtaccggcac cagcagtggg aaccaagtaa atcttactat tcaaggactg 720

agggcaatgg acacgggact ttacatttgt aaggtcgagc agatgtaccc gccaccttac 780

ctcctcggaa tcggtaatgg tacgcaaatt tatgttatag atcctgaacc gtgccccgat 840

tccgacggat ccggtggagg agggtcagag cccaaaagct ccgacaagac tcacacatgc 900

ccccccttgtc cagcgcctga agctgagggt gcgccctctg tcttcctttt ccccccctaag 960

ccgaaagata ccctgatgat ctcccgcact cccgaagtca catgtgttgt tgtcgacgta 1020

tctcatgaag atcctgaggt gaaattcaac tggtatgtag acggggtcga agttcataat 1080

gctaagacta agccacgaga agagcaatac aactcaacgt atcgggtggt gagcgttctg 1140

acggttctgc accaagattg gcttaatgga aaagagtata agtgcaaggt gtccaacaag 1200

gctcttccgg cacccatcga aaagacgatt tccaaagcga aaggccaacc tagggaaccg 1260

caagtttaca ctttgccccc gtcaagagac gaacttacca agaatcaagt ttccctgacg 1320

tgccttgtga agggcttcta ccctagcgat atagcagttg agtgggaatc taacggccag 1380

cccgaaaata attataagac tactccgccc gtgctggaca gtgatggttc atttttcctg 1440

tattcaaaac tcactgtgga caaatctaga tggcagcagg gtaatgtgtt ctcttgttca 1500

gttatgcacg aggcattgca caatcactat acgcaaaaaa gtttgtctct ctctccgggg 1560

<210> 3654
<211> 501
<212> PRT
<213> Artificial sequence

<220>
<223> CD155 665 - CTLA4 3037 - Fc

<400> 3654

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu

85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Lys Ala Met His Val Ala Gln
130 135 140

Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala Ser Phe Val Cys
145 150 155 160

Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg Val Thr Val Leu
165 170 175

Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met
180 185 190

Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr
195 200 205

Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met
210 215 220

Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met Tyr Pro Pro Pro
225 230 235 240

Tyr Leu Leu Gly Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro
245 250 255

Glu Pro Cys Pro Asp Ser Asp Gly Ser Gly Gly Gly Gly Ser Glu Pro
260 265 270

Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu

```
        275                 280                 285

Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
    290                 295                 300

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
305                 310                 315                 320

Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
                325                 330                 335

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
            340                 345                 350

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
        355                 360                 365

Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
    370                 375                 380

Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
385                 390                 395                 400

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
                405                 410                 415

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
            420                 425                 430

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
        435                 440                 445

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
    450                 455                 460

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
```

465 470 475 480

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
485 490 495

Ser Leu Ser Pro Gly
500

<210> 3655
<211> 1719
<212> DNA
<213> Artificial sequence

<220>
<223> CD155 665 - CD155 665 - ICOSL 2264 - ICOSL 2264

<400> 3655
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ccacccccag gaaccgggga cgtcgtcgtg caggcgccca cccaggtgtc cggcttcttg 120

ggcgactccg tgacgctgcc ctgctaccta caggtgccca acatggaggt gacgcatgtg 180

tcacagctga cttgggcgcg gcatggtgaa tctggcagca tggccgtctt ccaccaaacg 240

cagggcccct ggtatgcgga gtccaaacgg ctggaattcg tggcagccag actgggcgcg 300

gagctgcgga atgcctcgct gagggtgttc gggttgcgcg cagaggatga aggcaactac 360

acctgccagt tcgtcacgtt cccgcagcgc agcaggagcg tggatatctg gctccgagtg 420

cttggaggtg gtggatcagg tggaggaggt tccggaggag gtggatcttg gccgccccca 480

gggaccggcg atgtagtggt ccaggcgcca acacaggtta gcgggttcct cggcgacagc 540

gtaacactcc cgtgctacct tcaagtacca aacatggaag ttacacacgt ctcccagctc 600

acttgggctc ggcacggaga gtccgggtct atggccgtct tccatcagac tcagggaccg 660

tggtatgctg agagcaaacg gcttgaattt gtggccgcga gattgggcgc cgaattgaga 720

aatgcaagcc tccgagtctt cgggcttagg gctgaggatg aaggcaatta cacctgccag 780

tttgtcacat tcccccaaag gtcccggtct gtggatattt ggctgcgggt ccttggtgga 840

ggtggctctg gaggtggtgg aagcggtggc ggtggtagcg atactcagga gaaggaagtc 900

agagcgatgg taggcagcga cgtggagctc agctgcgctt gccctgaagg aagccgtttt 960

gatttaaatg atgtttacgt atattggcaa accagtgagt cgaaaaccgt ggtgacctac 1020

cacatcccac agcacagctc cttggaatat gtggacagcc gctaccggaa ccgagccctg 1080

atgtcaccgg ccggcatgct gcggggcgac ttctccctgc gcttgttcaa cgtcaccccc 1140

caggacgagc agaagtttca ctgcctggtg ttgagcagat ccctgggatt ccaggaggtt 1200

ttgagcgttg aggttacact gcatgtggca gcaaacttca gcgtgggatc cggagggtct 1260

gggggaggcg gttctggggg tggaggctca gatactcagg aaaaggaagt gagagcaatg 1320

gttgggtcag atgtggaatt gagctgtgca tgccccgaag gaagtagatt cgatctcaat 1380

gatgtctatg tgtactggca aaccagcgag agcaagactg tggtaaccta tcacattccg 1440

caacacagtt cacttgaata tgtggatagc cggtaccgaa atcgggctct tatgtctccg 1500

gcagggatgc ttaggggtga cttttccttg agacttttca acgtcactcc tcaggacgag 1560

cagaaattcc attgtcttgt cctgtctcgg tccttggggt ttcaggaagt gctgtctgta 1620

gaggtgacgc tgcacgtcgc tgctaacttt agcgtgggat ccggtggagg agggtcagac 1680

tataaagatg acgacgacaa acaccatcat caccatcac 1719

<210> 3656
<211> 554
<212> PRT
<213> Artificial sequence

<220>
<223> CD155 665 - CD155 665 - ICOSL 2264 - ICOSL 2264

<400> 3656

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

```
Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
        35                  40                  45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly
        115                 120                 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Trp Pro Pro Pro Gly Thr Gly
    130                 135                 140

Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly Phe Leu Gly Asp
145                 150                 155                 160

Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn Met Glu Val Thr
                165                 170                 175

His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu Ser Gly Ser Met
            180                 185                 190

Ala Val Phe His Gln Thr Gln Gly Pro Trp Tyr Ala Glu Ser Lys Arg
        195                 200                 205

Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu Arg Asn Ala Ser
    210                 215                 220
```

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Leu Arg Val Phe Gly Leu Arg Ala Glu Asp Glu Gly Asn Tyr Thr Cys
225                 230                 235                 240


Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val Asp Ile Trp Leu
                245                 250                 255


Arg Val Leu Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
            260                 265                 270


Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
        275                 280                 285


Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
    290                 295                 300


Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
305                 310                 315                 320


Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
                325                 330                 335


Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
            340                 345                 350


Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
        355                 360                 365


Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
    370                 375                 380


Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly
385                 390                 395                 400


Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys
                405                 410                 415
```

Glu Val Arg Ala Met Val Gly Ser Asp Val Glu Leu Ser Cys Ala Cys
420 425 430

Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln
435 440 445

Thr Ser Glu Ser Lys Thr Val Val Thr Tyr His Ile Pro Gln His Ser
450 455 460

Ser Leu Glu Tyr Val Asp Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser
465 470 475 480

Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu Arg Leu Phe Asn Val
485 490 495

Thr Pro Gln Asp Glu Gln Lys Phe His Cys Leu Val Leu Ser Arg Ser
500 505 510

Leu Gly Phe Gln Glu Val Leu Ser Val Glu Val Thr Leu His Val Ala
515 520 525

Ala Asn Phe Ser Val Gly Ser Gly Gly Gly Gly Ser Asp Tyr Lys Asp
530 535 540

Asp Asp Asp Lys His His His His His His
545 550

<210> 3657
<211> 1719
<212> DNA
<213> Artificial sequence

<220>
<223> CD155 665 - ICOSL 2264 - ICOSL 2264 - CD155 665

<400> 3657
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ccacccccag gaaccgggga cgtcgtcgtg caggcgccca cccaggtgtc cggcttcttg 120

ggcgactccg tgacgctgcc ctgctaccta caggtgccca acatggaggt gacgcatgtg 180

tcacagctga cttgggcgcg gcatggtgaa tctggcagca tggccgtctt ccaccaaacg 240

cagggcccct ggtatgcgga gtccaaacgg ctggaattcg tggcagccag actgggcgcg 300

gagctgcgga atgcctcgct gagggtgttc gggttgcgcg cagaggatga aggcaactac 360

acctgccagt tcgtcacgtt cccgcagcgc agcaggagcg tggatatctg gctccgagtg 420

cttggaggtg gtggatcagg tggaggaggt accggaggtg gtggatctga tactcaggag 480

aaggaagtca gagcgatggt aggcagcgac gtggagctca gctgcgcttg ccctgaagga 540

agccgttttg atttaaatga tgtttacgta tattggcaaa ccagtgagtc gaaaaccgtg 600

gtgacctacc acatcccaca gcacagctcc ttggaatatg tggacagccg ctaccggaac 660

cgagccctga tgtcaccggc cggcatgctg cggggcgact tctccctgcg cttgttcaac 720

gtcacccccc aggacgagca gaagtttcac tgcctggtgt tgagcagatc cctgggattc 780

caggaggttt tgagcgttga ggttacactg catgtggcag caaacttcag cgtgggtgga 840

ggtggctctg gaggtggtgg aagcggtggc ggtggtagcg atactcagga aaaggaagtg 900

agagcaatgg ttgggtcaga tgtggaattg agctgtgcat gccccgaagg aagtagattc 960

gatctcaatg atgtctatgt gtactggcaa accagcgaga gcaagactgt ggtaacctat 1020

cacattccgc aacacagttc acttgaatat gtggatagcc ggtaccgaaa tcgggctctt 1080

atgtctccgg cagggatgct taggggtgac ttttccttga gacttttcaa cgtcactcct 1140

caggacgagc agaaattcca ttgtcttgtc ctgtctcggt ccttggggtt tcaggaagtg 1200

ctgtctgtag aggtgacgct gcacgtcgct gctaacttta gcgtgggatc cggagggtct 1260

gggggaggcg gttctggggg tggaggctca tggccgcccc cagggaccgg cgatgtagtg 1320

gtccaggcgc caacacaggt tagcgggttc ctcggcgaca gcgtaacact cccgtgctac 1380

cttcaagtac caaacatgga agttacacac gtctcccagc tcacttgggc tcggcacgga 1440

gagtccgggt ctatggccgt cttccatcag actcagggac cgtggtatgc tgagagcaaa 1500

cggcttgaat ttgtggccgc gagattgggc gccgaattga gaaatgcaag cctccgagtc 1560

ttcgggctta gggctgagga tgaaggcaat tacacctgcc agtttgtcac attcccccaa 1620

aggtcccggt ctgtggatat ttggctgcgg gtccttggat ccggtggagg agggtcagac 1680

tataaagatg acgacgacaa acaccatcat caccatcac 1719

<210> 3658
<211> 554
<212> PRT
<213> Artificial sequence

<220>
<223> CD155 665 - ICOSL 2264 - ICOSL 2264 - CD155 665

<400> 3658

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
50 55 60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65 70 75 80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu
85 90 95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
100 105 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly

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        115                 120                 125

Gly Gly Gly Thr Gly Gly Gly Gly Ser Asp Thr Gln Glu Lys Glu Val
    130                 135                 140

Arg Ala Met Val Gly Ser Asp Val Glu Leu Ser Cys Ala Cys Pro Glu
145                 150                 155                 160

Gly Ser Arg Phe Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser
                165                 170                 175

Glu Ser Lys Thr Val Val Thr Tyr His Ile Pro Gln His Ser Ser Leu
            180                 185                 190

Glu Tyr Val Asp Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala
        195                 200                 205

Gly Met Leu Arg Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro
    210                 215                 220

Gln Asp Glu Gln Lys Phe His Cys Leu Val Leu Ser Arg Ser Leu Gly
225                 230                 235                 240

Phe Gln Glu Val Leu Ser Val Glu Val Thr Leu His Val Ala Ala Asn
                245                 250                 255

Phe Ser Val Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
            260                 265                 270

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp
        275                 280                 285

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
    290                 295                 300

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
```

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305                 310                 315                 320

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
                325                 330                 335

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
            340                 345                 350

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
        355                 360                 365

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
    370                 375                 380

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Ser Gly Gly
385                 390                 395                 400

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Trp Pro Pro Pro Gly
                405                 410                 415

Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly Phe Leu
            420                 425                 430

Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn Met Glu
        435                 440                 445

Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu Ser Gly
    450                 455                 460

Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Trp Tyr Ala Glu Ser
465                 470                 475                 480

Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu Arg Asn
                485                 490                 495

Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu Asp Glu Gly Asn Tyr
```

500 505 510

Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val Asp Ile
515 520 525

Trp Leu Arg Val Leu Gly Ser Gly Gly Gly Gly Ser Asp Tyr Lys Asp
530 535 540

Asp Asp Asp Lys His His His His His His
545 550

<210> 3659
<211> 1464
<212> DNA
<213> Artificial sequence

<220>
<223> CD155 665 - CD58 3650 - Fc

<400> 3659
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ccacccccag gaaccgggga cgtcgtcgtg caggcgccca cccaggtgtc cggcttcttg 120

ggcgactccg tgacgctgcc ctgctaccta caggtgccca acatggaggt gacgcatgtg 180

tcacagctga cttgggcgcg gcatggtgaa tctggcagca tggccgtctt ccaccaaacg 240

cagggcccct ggtatgcgga gtccaaacgg ctggaattcg tggcagccag actgggcgcg 300

gagctgcgga atgcctcgct gagggtgttc gggttgcgcg cagaggatga aggcaactac 360

acctgccagt tcgtcacgtt cccgcagcgc agcaggagcg tggatatctg gctccgagtg 420

cttggaggtg gtggatcagg tggaggaggt tccggaggag gtggatcttc ccaacaaata 480

tatggtgttg tgtatgggaa tgtaactttc catgtaccaa gcaatgtgcc tttaaaagag 540

gtcctatgga aaaaacaaaa ggataaagtt gcagaactgg aaaattctga attcagagct 600

ttctcatctt ttaaaaatag ggtttattta gacactgtgt caggtagcct cactatctac 660

aacttaacat catcagatga agatgagtat gaaatggaat cgccaaatat tactgatacc 720

atgaagttct ttctttatgt gcttgagtct ggatccggtg gaggagggtc agagcccaaa 780

agctccgaca agactcacac atgcccccct tgtccagcgc ctgaagctga gggtgcgccc 840

tctgtcttcc ttttcccccc taagccgaaa gataccctga tgatctcccg cactcccgaa 900

gtcacatgtg ttgttgtcga cgtatctcat gaagatcctg aggtgaaatt caactggtat 960

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tataagtgca aggtgtccaa caaggctctt ccggcaccca tcgaaaagac gatttccaaa 1140

gcgaaaggcc aacctaggga accgcaagtt tacactttgc ccccgtcaag agacgaactt 1200

accaagaatc aagtttccct gacgtgcctt gtgaagggct tctaccctag cgatatagca 1260

gttgagtggg aatctaacgg ccagcccgaa aataattata agactactcc gcccgtgctg 1320

gacagtgatg gttcattttt cctgtattca aaactcactg tggacaaatc tagatggcag 1380

cagggtaatg tgttctcttg ttcagttatg cacgaggcat tgcacaatca ctatacgcaa 1440

aaaagtttgt ctctctctcc gggg 1464

<210> 3660
<211> 469
<212> PRT
<213> Artificial sequence

<220>
<223> CD155 665 - CD58 3650 - Fc

<400> 3660

Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln
1 5 10 15

Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln
20 25 30

Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg
35 40 45

```
His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro
    50                  55                  60

Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly
65                  70                  75                  80

Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu
                85                  90                  95

Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser
            100                 105                 110

Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly Ser Gly
        115                 120                 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Gln Gln Ile Tyr Gly Val
    130                 135                 140

Val Tyr Gly Asn Val Thr Phe His Val Pro Ser Asn Val Pro Leu Lys
145                 150                 155                 160

Glu Val Leu Trp Lys Lys Gln Lys Asp Lys Val Ala Glu Leu Glu Asn
                165                 170                 175

Ser Glu Phe Arg Ala Phe Ser Ser Phe Lys Asn Arg Val Tyr Leu Asp
            180                 185                 190

Thr Val Ser Gly Ser Leu Thr Ile Tyr Asn Leu Thr Ser Ser Asp Glu
        195                 200                 205

Asp Glu Tyr Glu Met Glu Ser Pro Asn Ile Thr Asp Thr Met Lys Phe
    210                 215                 220

Phe Leu Tyr Val Leu Glu Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro
225                 230                 235                 240
```

```
Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
                245                 250                 255

Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
            260                 265                 270

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
        275                 280                 285

Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
    290                 295                 300

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
305                 310                 315                 320

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
                325                 330                 335

Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
            340                 345                 350

Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
        355                 360                 365

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
    370                 375                 380

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
385                 390                 395                 400

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
                405                 410                 415

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
            420                 425                 430
```

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
435 440 445

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
450 455 460

Ser Leu Ser Pro Gly
465

<210> 3661
<211> 1464
<212> DNA
<213> Artificial sequence

<220>
<223> CD58 3650 - CD155 665 - Fc

<400> 3661
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgcttcc 60

caacaaatat atggtgttgt gtatgggaat gtaactttcc atgtaccaag caatgtgcct 120

ttaaaagagg tcctatggaa aaaacaaaag gataaagttg cagaactgga aaattctgaa 180

ttcagagctt tctcatcttt taaaaatagg gtttatttag acactgtgtc aggtagcctc 240

actatctaca acttaacatc atcagatgaa gatgagtatg aaatggaatc gccaaatatt 300

actgatacca tgaagttctt tctttatgtg cttgagtctg gaggtggtgg atcaggtgga 360

ggaggttccg gaggaggtgg atcttggcca cccccaggaa ccggggacgt cgtcgtgcag 420

gcgcccaccc aggtgtccgg cttcttgggc gactccgtga cgctgccctg ctacctacag 480

gtgcccaaca tggaggtgac gcatgtgtca cagctgactt gggcgcggca tggtgaatct 540

ggcagcatgg ccgtcttcca ccaaacgcag ggcccctggt atgcggagtc caaacggctg 600

gaattcgtgg cagccagact gggcgcggag ctgcggaatg cctcgctgag ggtgttcggg 660

ttgcgcgcag aggatgaagg caactacacc tgccagttcg tcacgttccc gcagcgcagc 720

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acgtatcggg tggtgagcgt tctgacggtt ctgcaccaag attggcttaa tggaaaagag 1080

tataagtgca aggtgtccaa caaggctctt ccggcaccca tcgaaaagac gatttccaaa 1140

gcgaaaggcc aacctaggga accgcaagtt tacactttgc ccccgtcaag agacgaactt 1200

accaagaatc aagtttccct gacgtgcctt gtgaagggct tctaccctag cgatatagca 1260

gttgagtggg aatctaacgg ccagcccgaa aataattata agactactcc gcccgtgctg 1320

gacagtgatg gttcattttt cctgtattca aaactcactg tggacaaatc tagatggcag 1380

cagggtaatg tgttctcttg ttcagttatg cacgaggcat tgcacaatca ctatacgcaa 1440

aaaagtttgt ctctctctcc gggg 1464

<210> 3662
<211> 469
<212> PRT
<213> Artificial sequence

<220>
<223> CD58 3650 - CD155 665 - Fc

<400> 3662

Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val
1 5 10 15

Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp
20 25 30

Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe
35 40 45

Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr

```
    50                  55                  60

Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn
65                  70                  75                  80

Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Gly Gly
                85                  90                  95

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Trp Pro Pro
            100                 105                 110

Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro Thr Gln Val Ser Gly
        115                 120                 125

Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr Leu Gln Val Pro Asn
    130                 135                 140

Met Glu Val Thr His Val Ser Gln Leu Thr Trp Ala Arg His Gly Glu
145                 150                 155                 160

Ser Gly Ser Met Ala Val Phe His Gln Thr Gln Gly Pro Trp Tyr Ala
                165                 170                 175

Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg Leu Gly Ala Glu Leu
            180                 185                 190

Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg Ala Glu Asp Glu Gly
        195                 200                 205

Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln Arg Ser Arg Ser Val
    210                 215                 220

Asp Ile Trp Leu Arg Val Leu Gly Ser Gly Gly Gly Gly Ser Glu Pro
225                 230                 235                 240

Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
```

```
                245                 250                 255

Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
            260                 265                 270

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
        275                 280                 285

Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
    290                 295                 300

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
305                 310                 315                 320

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
                325                 330                 335

Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
            340                 345                 350

Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
        355                 360                 365

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
    370                 375                 380

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
385                 390                 395                 400

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
                405                 410                 415

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
            420                 425                 430

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
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435 440 445

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
450 455 460

Ser Leu Ser Pro Gly
465

<210> 3663
<211> 1950
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 - CD155 665 - CTLA4 3037 - Fc

<400> 3663
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctttt 60

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggtggagg tggctctgga 420

ggtggtggaa gcggtggcgg tggtagctgg ccacccccag gaaccgggga cgtcgtcgtg 480

caggcgccca cccaggtgtc cggcttcttg ggcgactccg tgacgctgcc ctgctaccta 540

caggtgccca acatggaggt gacgcatgtg tcacagctga cttgggcgcg gcatggtgaa 600

tctggcagca tggccgtctt ccaccaaacg cagggcccct ggtatgcgga gtccaaacgg 660

ctggaattcg tggcagccag actgggcgcg gagctgcgga atgcctcgct gagggtgttc 720

gggttgcgcg cagaggatga aggcaactac acctgccagt tcgtcacgtt cccgcagcgc 780

agcaggagcg tggatatctg gctccgagtg cttggaggtg gtggatcagg tggaggaggt 840

tccggaggag gtggatctaa agcgatgcac gtcgcccagc ctgctgtcgt attcgccagc 900

tcacacggca tcgcaagttt cgtatgcgaa tatgcctctc catggaaagc gaccgaggtc 960

agagttactg tactgagaca agctgattca caagtgactg aggtctgcgc tgctacttat 1020

atgacgggga acgagctgac tttccttgat gactcaatct gtaccggcac cagcagtggg 1080

aaccaagtaa atcttactat tcaaggactg agggcaatgg acacgggact ttacatttgt 1140

aaggtcgagc agatgtaccc gccaccttac ctcctcggaa tcggtaatgg tacgcaaatt 1200

tatgttatag atcctgaacc gtgccccgat tccgacggat ccggtggagg agggtcagag 1260

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tggtatgtag acggggtcga agttcataat gctaagacta agccacgaga agagcaatac 1500

aactcaacgt atcgggtggt gagcgttctg acggttctgc accaagattg gcttaatgga 1560

aaagagtata agtgcaaggt gtccaacaag gctcttccgg cacccatcga aaagacgatt 1620

tccaaagcga aaggccaacc tagggaaccg caagtttaca ctttgccccc gtcaagagac 1680

gaacttacca agaatcaagt ttccctgacg tgccttgtga agggcttcta ccctagcgat 1740

atagcagttg agtgggaatc taacggccag cccgaaaata attataagac tactccgccc 1800

gtgctggaca gtgatggttc atttttcctg tattcaaaac tcactgtgga caaatctaga 1860

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acgcaaaaaa gtttgtctct ctctccgggg 1950

<210> 3664
<211> 631
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - CD155 665 - CTLA4 3037 - Fc

<400> 3664

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Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Trp Pro Pro Pro Gly Thr Gly Asp Val Val Val Gln Ala Pro
    130                 135                 140

Thr Gln Val Ser Gly Phe Leu Gly Asp Ser Val Thr Leu Pro Cys Tyr
145                 150                 155                 160

Leu Gln Val Pro Asn Met Glu Val Thr His Val Ser Gln Leu Thr Trp
                165                 170                 175

Ala Arg His Gly Glu Ser Gly Ser Met Ala Val Phe His Gln Thr Gln
            180                 185                 190
```

```
Gly Pro Trp Tyr Ala Glu Ser Lys Arg Leu Glu Phe Val Ala Ala Arg
        195                 200                 205

Leu Gly Ala Glu Leu Arg Asn Ala Ser Leu Arg Val Phe Gly Leu Arg
    210                 215                 220

Ala Glu Asp Glu Gly Asn Tyr Thr Cys Gln Phe Val Thr Phe Pro Gln
225                 230                 235                 240

Arg Ser Arg Ser Val Asp Ile Trp Leu Arg Val Leu Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Lys Ala Met His Val
            260                 265                 270

Ala Gln Pro Ala Val Val Phe Ala Ser Ser His Gly Ile Ala Ser Phe
        275                 280                 285

Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr Glu Val Arg Val Thr
    290                 295                 300

Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala Ala Thr
305                 310                 315                 320

Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr
                325                 330                 335

Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly Leu Arg
            340                 345                 350

Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Gln Met Tyr Pro
        355                 360                 365

Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr Gln Ile Tyr Val Ile
    370                 375                 380
```

```
Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser Gly Gly Gly Gly Ser
385                 390                 395                 400


Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
                405                 410                 415


Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
            420                 425                 430


Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
        435                 440                 445


Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
    450                 455                 460


Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
465                 470                 475                 480


Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
                485                 490                 495


Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
            500                 505                 510


Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
        515                 520                 525


Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
    530                 535                 540


Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
545                 550                 555                 560


Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
                565                 570                 575
```

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
580 585 590

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
595 600 605

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
610 615 620

Ser Leu Ser Leu Ser Pro Gly
625 630

<210> 3665
<211> 1554
<212> DNA
<213> Artificial sequence

<220>
<223> CTLA4 3037 - PD-L1 303 - Fc

<400> 3665
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gcgatgcacg tcgcccagcc tgccgtcgta ctcgctagct cacgcggcat cgctagtttc 120

gtatgcgaat atgcctctcc atggaaagcg accgaggtca gagttactgt actgagacaa 180

gctgattcac aagtgactga ggtctgcgct gctacttata tgatggggag cgagctgact 240

ttccctgatg actcaatctg taccggcacc agcagtggga accaagtaaa tcttactatt 300

cgaggactga gggcaatgga cacgggactt tacatttgta aggtcgagca gatgtacccg 360

ccaccttacc tcctcggaat cggtaatggt acgcaaattt atgttataga tcctgaaccg 420

tgccccgatt ccgacggatc cggagggtct gggggaggcg gttctggggg tggaggctca 480

tttaccgtaa cggtccctaa ggatttgtac gtggttgagt acgggagcaa tatgacgatt 540

gaatgcaagt tccccgtaga gaagcagctc gatttggccg ctttgatagt gtactgggaa 600

atggaaggaa aagacatcat tcaattcgtc cacggtgaag aggatcaaaa agcgcaacat 660

agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 720

ctgcagatta ccgacgtaaa acttcaagac gcgggagttt atcgctgcat gatttcctac 780

gggggtggcg cagactataa aaggatcact gtaaaggtaa acgccggcgg aggtggttcc 840

ggatccggtg gaggaggctc cgagcccaaa agctccgaca agactcacac atgccccct 900

tgtccagcgc ctgaagctga gggtgcgccc tctgtcttcc ttttcccccc taagccgaaa 960

gataccctga tgatctcccg cactcccgaa gtcacatgtg ttgttgtcga cgtatctcat 1020

gaagatcctg aggtgaaatt caactggtat gtagacgggg tcgaagttca taatgctaag 1080

actaagccac gagaagagca atacaactca acgtatcggg tggtgagcgt tctgacggtt 1140

ctgcaccaag attggcttaa tggaaaagag tataagtgca aggtgtccaa caaggctctt 1200

ccggcaccca tcgaaaagac gatttccaaa gcgaaaggcc aacctaggga accgcaagtt 1260

tacactttgc ccccgtcaag agacgaactt accaagaatc aagtttccct gacgtgcctt 1320

gtgaagggct tctaccctag cgatatagca gttgagtggg aatctaacgg ccagcccgaa 1380

aataattata agactactcc gcccgtgctg gacagtgatg gttcattttt cctgtattca 1440

aaactcactg tggacaaatc tagatggcag cagggtaatg tgttctcttg ttcagttatg 1500

cacgaggcat tgcacaatca ctatacgcaa aaaagtttgt ctctctctcc gggg 1554

<210> 3666
<211> 499
<212> PRT
<213> Artificial sequence

<220>
<223> CTLA4 3037 - PD-L1 303 - Fc

<400> 3666

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

```
Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
        35                  40                  45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
    50                  55                  60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65                  70                  75                  80

Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
                85                  90                  95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
            100                 105                 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser
        115                 120                 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val
    130                 135                 140

Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr
145                 150                 155                 160

Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu
                165                 170                 175

Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His
            180                 185                 190

Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala
        195                 200                 205

Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile
    210                 215                 220
```

```
Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser
225                 230                 235                 240


Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
                245                 250                 255


Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser
            260                 265                 270


Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu
        275                 280                 285


Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
    290                 295                 300


Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
305                 310                 315                 320


His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
                325                 330                 335


Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
            340                 345                 350


Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
        355                 360                 365


Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
    370                 375                 380


Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
385                 390                 395                 400


Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
                405                 410                 415
```

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
420 425 430

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
435 440 445

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
450 455 460

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
465 470 475 480

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
485 490 495

Ser Pro Gly

<210> 3667
<211> 1554
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 - CTLA4 3037 - Fc

<400> 3667
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accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggatccgg agggtctggg 420

ggaggcggtt ctgggggtgg aggctcaaaa gcgatgcacg tcgcccagcc tgccgtcgta 480

ctcgctagct cacgcggcat cgctagtttc gtatgcgaat atgcctctcc atggaaagcg 540

accgaggtca gagttactgt actgagacaa gctgattcac aagtgactga ggtctgcgct 600

gctacttata tgatggggag cgagctgact ttccctgatg actcaatctg taccggcacc 660

agcagtggga accaagtaaa tcttactatt cgaggactga gggcaatgga cacgggactt 720

tacatttgta aggtcgagca gatgtacccg ccaccttacc tcctcggaat cggtaatggt 780

acgcaaattt atgttataga tcctgaaccg tgccccgatt ccgacggcgg aggtggttcc 840

ggatccggtg gaggaggctc cgagcccaaa agctccgaca agactcacac atgcccccct 900

tgtccagcgc ctgaagctga gggtgcgccc tctgtcttcc ttttcccccc taagccgaaa 960

gataccctga tgatctcccg cactcccgaa gtcacatgtg ttgttgtcga cgtatctcat 1020

gaagatcctg aggtgaaatt caactggtat gtagacgggg tcgaagttca taatgctaag 1080

actaagccac gagaagagca atacaactca acgtatcggg tggtgagcgt tctgacggtt 1140

ctgcaccaag attggcttaa tggaaaagag tataagtgca aggtgtccaa caaggctctt 1200

ccggcaccca tcgaaaagac gatttccaaa gcgaaaggcc aacctaggga accgcaagtt 1260

tacactttgc ccccgtcaag agacgaactt accaagaatc aagtttccct gacgtgcctt 1320

gtgaagggct tctaccctag cgatatagca gttgagtggg aatctaacgg ccagcccgaa 1380

aataattata agactactcc gcccgtgctg gacagtgatg gttcattttt cctgtattca 1440

aaactcactg tggacaaatc tagatggcag cagggtaatg tgttctcttg ttcagttatg 1500

cacgaggcat tgcacaatca ctatacgcaa aaaagtttgt ctctctctcc gggg 1554

<210> 3668
<211> 499
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - CTLA4 3037 - Fc

<400> 3668

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   10                  15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
            20                  25                  30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
        35                  40                  45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
    50                  55                  60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65                  70                  75                  80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
                85                  90                  95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110

Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser
    130                 135                 140

Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys
145                 150                 155                 160

Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val
                165                 170                 175

Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe
            180                 185                 190
```

```
Pro Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn
        195                 200                 205

Leu Thr Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys
    210                 215                 220

Lys Val Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn
225                 230                 235                 240

Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
                245                 250                 255

Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser
            260                 265                 270

Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu
        275                 280                 285

Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
    290                 295                 300

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
305                 310                 315                 320

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
                325                 330                 335

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
            340                 345                 350

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
        355                 360                 365

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
    370                 375                 380
```

```
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
385                 390                 395                 400


Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
                405                 410                 415


Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
            420                 425                 430


Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
        435                 440                 445


Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
    450                 455                 460


Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
465                 470                 475                 480


Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
                485                 490                 495


Ser Pro Gly
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<210> 3669
<211> 1539
<212> DNA
<213> Artificial sequence

<220>
<223> CTLA4 3037 - Fc - PD-L1 303

<400> 3669

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gcgatgcacg tcgcccagcc tgccgtcgta ctcgctagct cacgcggcat cgctagtttc      120

gtatgcgaat atgcctctcc atggaaagcg accgaggtca gagttactgt actgagacaa      180
```

gctgattcac aagtgactga ggtctgcgct gctacttata tgatggggag cgagctgact 240

ttccctgatg actcaatctg taccggcacc agcagtggga accaagtaaa tcttactatt 300

cgaggactga gggcaatgga cacgggactt tacatttgta aggtcgagca gatgtacccg 360

ccaccttacc tcctcggaat cggtaatggt acgcaaattt atgttataga tcctgaaccg 420

tgccccgatt ccgacgggtc tgggggaggc ggttctgagc ccaaaagctc cgacaagact 480

cacacatgcc ccccttgtcc agcgcccgaa gctgagggtg cgccctctgt cttccttttc 540

ccccctaagc cgaaagatac cctgatgatc tcccgcactc ccgaagtcac atgtgttgtt 600

gtcgacgtat ctcatgaaga tcctgaggtg aaattcaact ggtatgtaga cggggtcgaa 660

gttcataatg ctaagactaa gccacgagaa gagcaataca actcaacgta tcgggtggtg 720

agcgttctga cggttctgca ccaagattgg cttaatggaa aagagtataa gtgcaaggtg 780

tccaacaagg ctcttccggc acccatcgaa aagacgattt ccaaagcgaa aggccaacct 840

agggaaccgc aagtttacac tttgcccccg tcaagagacg aacttaccaa gaatcaagtt 900

tccctgacgt gccttgtgaa gggcttctac cctagcgata tagcagttga gtgggaatct 960

aacggccagc ccgaaaataa ttataagact actccgcccg tgctggacag tgatggttca 1020

tttttcctgt attcaaaact cactgtggac aaatctagat ggcagcaggg taatgtgttc 1080

tcttgttcag ttatgcacga ggcattgcac aatcactata cgcaaaaaag tttgtctctc 1140

tctccggggg gtggaggtgg ctctggaggt ggtggaagcg gtggcggtgg tagctttacc 1200

gtaacggtcc ctaaggattt gtacgtggtt gagtacggga gcaatatgac gattgaatgc 1260

aagttccccg tagagaagca gctcgatttg gccgctttga tagtgtactg ggaaatggaa 1320

ggaaaagaca tcattcaatt cgtccacggt gaagaggatc aaaaagcgca acatagctcc 1380

tatagacaac gcgcacgctt gcttaaagac cagctgagtc ttggtaacgc ggcgctgcag 1440

attaccgacg taaaacttca agacgcggga gtttatcgct gcatgatttc ctacgggggt 1500

ggcgcagact ataaaaggat cactgtaaag gtaaacgcc 1539

<210> 3670

<211> 494
<212> PRT
<213> Artificial sequence

<220>
<223> CTLA4 3037 - Fc - PD-L1 303

<400> 3670

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser
115 120 125

Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys
130 135 140

Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu
145 150 155 160

```
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
                165                 170                 175

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
            180                 185                 190

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
        195                 200                 205

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
    210                 215                 220

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
225                 230                 235                 240

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
                245                 250                 255

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
            260                 265                 270

Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
        275                 280                 285

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
    290                 295                 300

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
305                 310                 315                 320

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
                325                 330                 335

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
            340                 345                 350
```

```
His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Gly Gly Gly Gly
        355                 360                 365


Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val
    370                 375                 380


Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu
385                 390                 395                 400


Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val
                405                 410                 415


Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu
            420                 425                 430


Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu
        435                 440                 445


Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp
    450                 455                 460


Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly
465                 470                 475                 480


Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
                485                 490


<210>  3671
<211>  1542
<212>  DNA
<213>  Artificial sequence

<220>
<223>  CTLA4 3037 - Fc - PD-L1 303

<400>  3671
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctaaa       60
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gcgatgcacg tcgcccagcc tgccgtcgta ctcgctagct cacgcggcat cgctagtttc 120

gtatgcgaat atgcctctcc atggaaagcg accgaggtca gagttactgt actgagacaa 180

gctgattcac aagtgactga ggtctgcgct gctacttata tgatggggag cgagctgact 240

ttccctgatg actcaatctg taccggcacc agcagtggga accaagtaaa tcttactatt 300

cgaggactga gggcaatgga cacgggactt tacatttgta aggtcgagca gatgtacccg 360

ccaccttacc tcctcggaat cggtaatggt acgcaaattt atgttataga tcctgaaccg 420

tgccccgatt ccgacgggtc tgggggaggc ggttctgagc ccaaaagctc cgacaagact 480

cacacatgcc ccccttgtcc agcgcccgaa gctgagggtg cgccctctgt cttccttttc 540

ccccctaagc cgaaagatac cctgatgatc tcccgcactc ccgaagtcac atgtgttgtt 600

gtcgacgtat ctcatgaaga tcctgaggtg aaattcaact ggtatgtaga cggggtcgaa 660

gttcataatg ctaagactaa gccacgagaa gagcaataca actcaacgta tcgggtggtg 720

agcgttctga cggttctgca ccaagattgg cttaatggaa aagagtataa gtgcaaggtg 780

tccaacaagg ctcttccggc acccatcgaa aagacgattt ccaaagcgaa aggccaacct 840

agggaaccgc aagtttacac tttgcccccg tcaagagacg aacttaccaa gaatcaagtt 900

tccctgacgt gccttgtgaa gggcttctac cctagcgata tagcagttga gtgggaatct 960

aacggccagc ccgaaaataa ttataagact actccgcccg tgctggacag tgatggttca 1020

tttttcctgt attcaaaact cactgtggac aaatctagat ggcagcaggg taatgtgttc 1080

tcttgttcag ttatgcacga ggcattgcac aatcactata cgcaaaaaag tttgtctctc 1140

tctccggggg gtggaggtgg ctctggaggt ggtggaagcg gtggcggtgg tagcgcattt 1200

accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 1260

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 1320

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 1380

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 1440

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 1500

ggtggcgcag actataaaag gatcactgta aaggtaaacg cc 1542

<210> 3672
<211> 495
<212> PRT
<213> Artificial sequence

<220>
<223> CTLA4 3037 - Fc - PD-L1 303

<400> 3672

Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala Ser Ser Arg
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Met Gly Ser Glu Leu Thr Phe Pro Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Arg Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser
115 120 125

Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys
130 135 140

```
Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val Phe Leu
145                 150                 155                 160


Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
                165                 170                 175


Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
            180                 185                 190


Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
        195                 200                 205


Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
    210                 215                 220


Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
225                 230                 235                 240


Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
                245                 250                 255


Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
            260                 265                 270


Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
        275                 280                 285


Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
    290                 295                 300


Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
305                 310                 315                 320


Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
                325                 330                 335
```

```
Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
            340                 345                 350

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Gly Gly Gly Gly
        355                 360                 365

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Phe Thr Val Thr
    370                 375                 380

Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile
385                 390                 395                 400

Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile
                405                 410                 415

Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly
            420                 425                 430

Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg
        435                 440                 445

Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr
    450                 455                 460

Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr
465                 470                 475                 480

Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
                485                 490                 495
```

<210> 3673
<211> 1554
<212> DNA
<213> Artificial sequence

<220>
<223> CTLA4 3060 - PD-L1 303 - Fc

<400> 3673
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gcgatgcacg tcgcccagcc tgctgtcgta ttcgccagct cacacggcat cgcaagtttc 120

gtatgcgaat atgcctctcc atggaaagcg accgaggtca gagttactgt actgagacaa 180

gctgattcac aagtgactga ggtctgcgct gctacttata tgacggggaa cgagctgact 240

ttccttgatg actcaatctg taccggcacc agcagtggga accaagtaaa tcttactatt 300

caaggactga gggcaatgga cacgggactt tacatttgta aggtcgagca gatgtacccg 360

ccaccttacc tcctcggaat cggtaatggt acgcaaattt atgttataga tcctgaaccg 420

tgccccgatt ccgacggatc cggagggtct gggggaggcg gttctggggg tggaggctca 480

tttaccgtaa cggtccctaa ggatttgtac gtggttgagt acgggagcaa tatgacgatt 540

gaatgcaagt tccccgtaga gaagcagctc gatttggccg ctttgatagt gtactgggaa 600

atggaaggaa aagacatcat tcaattcgtc cacggtgaag aggatcaaaa agcgcaacat 660

agctcctata gacaacgcgc acgcttgctt aaagaccagc tgagtcttgg taacgcggcg 720

ctgcagatta ccgacgtaaa acttcaagac gcgggagttt atcgctgcat gatttcctac 780

gggggtggcg cagactataa aaggatcact gtaaaggtaa acgccggtgg aggtgggtca 840

ggatccggtg gaggagggtc agagcccaaa agctccgaca agactcacac atgcccccct 900

tgtccagcgc ctgaagctga gggtgcgccc tctgtcttcc ttttcccccc taagccgaaa 960

gataccctga tgatctcccg cactcccgaa gtcacatgtg ttgttgtcga cgtatctcat 1020

gaagatcctg aggtgaaatt caactggtat gtagacgggg tcgaagttca taatgctaag 1080

actaagccac gagaagagca atacaactca acgtatcggg tggtgagcgt tctgacggtt 1140

ctgcaccaag attggcttaa tggaaaagag tataagtgca aggtgtccaa caaggctctt 1200

ccggcaccca tcgaaaagac gatttccaaa gcgaaaggcc aacctaggga accgcaagtt 1260

tacactttgc ccccgtcaag agacgaactt accaagaatc aagtttccct gacgtgcctt 1320

gtgaagggct tctaccctag cgatatagca gttgagtggg aatctaacgg ccagcccgaa 1380

aataattata agactactcc gcccgtgctg gacagtgatg gttcattttt cctgtattca 1440

aaactcactg tggacaaatc tagatggcag cagggtaatg tgttctcttg ttcagttatg 1500

cacgaggcat tgcacaatca ctatacgcaa aaaagtttgt ctctctctcc gggg 1554

<210> 3674
<211> 499
<212> PRT
<213> Artificial sequence

<220>
<223> CTLA4 3060 - PD-L1 303 - Fc

<400> 3674

Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser Ser His
1 5 10 15

Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys Ala Thr
20 25 30

Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu
35 40 45

Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe Leu Asp
50 55 60

Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr
65 70 75 80

Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val
85 90 95

Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn Gly Thr
100 105 110

Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Gly Ser
115 120 125

```
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val
    130                 135                 140

Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr
145                 150                 155                 160

Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu
                165                 170                 175

Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His
            180                 185                 190

Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala
        195                 200                 205

Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile
    210                 215                 220

Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser
225                 230                 235                 240

Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
                245                 250                 255

Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser
            260                 265                 270

Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu
        275                 280                 285

Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
    290                 295                 300

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
305                 310                 315                 320
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```
His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
                325                 330                 335

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
            340                 345                 350

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
        355                 360                 365

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
    370                 375                 380

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
385                 390                 395                 400

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
                405                 410                 415

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
            420                 425                 430

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
        435                 440                 445

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
    450                 455                 460

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
465                 470                 475                 480

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
                485                 490                 495

Ser Pro Gly
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<210> 3675
<211> 1554
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 - CTLA4 3060 - Fc

<400> 3675
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accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggatccgg agggtctggg 420

ggaggcggtt ctgggggtgg aggctcaaaa gcgatgcacg tcgcccagcc tgctgtcgta 480

ttcgccagct cacacggcat cgcaagtttc gtatgcgaat atgcctctcc atggaaagcg 540

accgaggtca gagttactgt actgagacaa gctgattcac aagtgactga ggtctgcgct 600

gctacttata tgacggggaa cgagctgact ttccttgatg actcaatctg taccggcacc 660

agcagtggga accaagtaaa tcttactatt caaggactga gggcaatgga cacgggactt 720

tacatttgta aggtcgagca gatgtacccg ccaccttacc tcctcggaat cggtaatggt 780

acgcaaattt atgttataga tcctgaaccg tgccccgatt ccgacggtgg aggtgggtca 840

ggatccggtg gaggagggtc agagcccaaa agctccgaca agactcacac atgccccct 900

tgtccagcgc ctgaagctga gggtgcgccc tctgtcttcc ttttcccccc taagccgaaa 960

gataccctga tgatctcccg cactcccgaa gtcacatgtg ttgttgtcga cgtatctcat 1020

gaagatcctg aggtgaaatt caactggtat gtagacgggg tcgaagttca taatgctaag 1080

actaagccac gagaagagca atacaactca acgtatcggg tggtgagcgt tctgacggtt 1140

ctgcaccaag attggcttaa tggaaaagag tataagtgca aggtgtccaa caaggctctt 1200

ccggcaccca tcgaaaagac gatttccaaa gcgaaaggcc aacctaggga accgcaagtt 1260

tacactttgc ccccgtcaag agacgaactt accaagaatc aagtttccct gacgtgcctt 1320

gtgaagggct tctaccctag cgatatagca gttgagtggg aatctaacgg ccagcccgaa 1380

aataattata agactactcc gcccgtgctg gacagtgatg gttcattttt cctgtattca 1440

aaactcactg tggacaaatc tagatggcag cagggtaatg tgttctcttg ttcagttatg 1500

cacgaggcat tgcacaatca ctatacgcaa aaaagtttgt ctctctctcc gggg 1554

<210> 3676
<211> 499
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - CTLA4 3060 - Fc

<400> 3676

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

```
Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
            100                 105                 110


Val Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125


Gly Ser Lys Ala Met His Val Ala Gln Pro Ala Val Val Phe Ala Ser
    130                 135                 140


Ser His Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Trp Lys
145                 150                 155                 160


Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val
                165                 170                 175


Thr Glu Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr Phe
            180                 185                 190


Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn
        195                 200                 205


Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys
    210                 215                 220


Lys Val Glu Gln Met Tyr Pro Pro Pro Tyr Leu Leu Gly Ile Gly Asn
225                 230                 235                 240


Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp
                245                 250                 255


Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser
            260                 265                 270


Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu
        275                 280                 285
```

```
Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
    290                 295                 300

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
305                 310                 315                 320

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
                325                 330                 335

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
            340                 345                 350

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
        355                 360                 365

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
    370                 375                 380

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
385                 390                 395                 400

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
                405                 410                 415

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
            420                 425                 430

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
        435                 440                 445

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
    450                 455                 460

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
465                 470                 475                 480
```

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
485 490 495

Ser Pro Gly

<210> 3677
<211> 1020
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2264 - ZZ12.6

<400> 3677
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgctttt 60

actgttacgg tacccaaaga cctgtacgta gtggagtacg ggtccaatat gaccatagaa 120

tgcaaattcc ccgtcgagaa gcaattggat ctcgccgctc tgatcgtcta ctgggagatg 180

gagggcaaag atatcattca attcgtacac ggggaagaag atcagaaagc tcaacacagc 240

tcttacaggc aacgggcgag actgctcaag gaccaattga gtcttggaaa cgctgcactt 300

cagatcaccg acgtgaagtt gcaggatgca ggcgtgtatc ggtgcatgat aagctatgga 360

ggaggggcag attataaaag gattacggtg aaggtaaacg caggtggcgg aggttctggc 420

ggaggtggaa gtggcggagg tggctctgat actcaggaga aggaagtcag agcgatggta 480

ggcagcgacg tggagctcag ctgcgcttgc cctgaaggaa gccgttttga tttaaatgat 540

gtttacgtat attggcaaac cagtgagtcg aaaaccgtgg tgacctacca catcccacag 600

cacagctcct tggaatatgt ggacagccgc taccggaacc gagccctgat gtcaccggcc 660

ggcatgctgc ggggcgactt ctccctgcgc ttgttcaacg tcacccccca ggacgagcag 720

aagtttcact gcctggtgtt gagcagatcc ctgggattcc aggaggtttt gagcgttgag 780

gttacactgc atgtggcagc aaacttcagc gtgggtggcg gaggttctgg cggaggtgga 840

agtggcggag gtggctctga cgtccaggcg atctcctcca ccatccagga ccttcaggac 900

caggtcgact ccctggcgga ggtggtgctg cagaatcgcc gcggccttga ccttcttacg 960

agaagcggcg gtggatcaga ctataaagat gacgacgaca aacaccatca tcaccatcac 1020

<210> 3678
<211> 321
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - ICOSL 2264 - ZZ12.6

<400> 3678

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp

```
    130                 135                 140

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn
145                 150                 155                 160

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr
                165                 170                 175

Tyr His Ile Pro Gln His Ser Ser Leu Glu Tyr Val Asp Ser Arg Tyr
            180                 185                 190

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe
        195                 200                 205

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His
    210                 215                 220

Cys Leu Val Leu Ser Arg Ser Leu Gly Phe Gln Glu Val Leu Ser Val
225                 230                 235                 240

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Gly Gly Gly Gly
                245                 250                 255

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Ala Ile
            260                 265                 270

Ser Ser Thr Ile Gln Asp Leu Gln Asp Gln Val Asp Ser Leu Ala Glu
        275                 280                 285

Val Val Leu Gln Asn Arg Arg Gly Leu Asp Leu Leu Thr Arg Ser Gly
    290                 295                 300

Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp Lys His His His His His
305                 310                 315                 320

His
```

<210> 3679
<211> 1443
<212> DNA
<213> Artificial sequence

<220>
<223> CD58 3650 - PD-L1 303 - Fc

<400> 3679
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caacaaatat atggtgttgt gtatgggaat gtaactttcc atgtaccaag caatgtgcct 120

ttaaaagagg tcctatggaa aaaacaaaag gataaagttg cagaactgga aaattctgaa 180

ttcagagctt tctcatcttt taaaaatagg gtttatttag acactgtgtc aggtagcctc 240

actatctaca acttaacatc atcagatgaa gatgagtatg aaatggaatc gccaaatatt 300

actgatacca tgaagttctt tctttatgtg cttgagtctg gaggtggtgg atcaggtgga 360

ggaggttccg gaggaggtgg atcttttacc gtaacggtcc ctaaggattt gtacgtggtt 420

gagtacggga gcaatatgac gattgaatgc aagttccccg tagagaagca gctcgatttg 480

gccgctttga tagtgtactg ggaaatggaa ggaaaagaca tcattcaatt cgtccacggt 540

gaagaggatc aaaaagcgca acatagctcc tatagacaac gcgcacgctt gcttaaagac 600

cagctgagtc ttggtaacgc ggcgctgcag attaccgacg taaaacttca agacgcggga 660

gtttatcgct gcatgatttc ctacgggggt ggcgcagact ataaaaggat cactgtaaag 720

gtaaacgccg gatccggtgg aggagggtca gagcccaaaa gctccgacaa gactcacaca 780

tgccccccctt gtccagcgcc tgaagctgag ggtgcgccct ctgtcttcct tttccccccct 840

aagccgaaag ataccctgat gatctcccgc actcccgaag tcacatgtgt tgttgtcgac 900

gtatctcatg aagatcctga ggtgaaattc aactggtatg tagacggggt cgaagttcat 960

aatgctaaga ctaagccacg agaagagcaa tacaactcaa cgtatcgggt ggtgagcgtt 1020

ctgacggttc tgcaccaaga ttggcttaat ggaaaagagt ataagtgcaa ggtgtccaac 1080

aaggctcttc cggcacccat cgaaaagacg atttccaaag cgaaaggcca acctagggaa 1140

ccgcaagttt acactttgcc cccgtcaaga gacgaactta ccaagaatca agtttccctg 1200

acgtgccttg tgaagggctt ctaccctagc gatatagcag ttgagtggga atctaacggc 1260

cagcccgaaa ataattataa gactactccg cccgtgctgg acagtgatgg ttcatttttc 1320

ctgtattcaa aactcactgt ggacaaatct agatggcagc agggtaatgt gttctcttgt 1380

tcagttatgc acgaggcatt gcacaatcac tatacgcaaa aaagtttgtc tctctctccg 1440

ggg 1443

<210> 3680
<211> 462
<212> PRT
<213> Artificial sequence

<220>
<223> CD58 3650 - PD-L1 303 - Fc

<400> 3680

Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val
1 5 10 15

Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp
20 25 30

Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe
35 40 45

Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr
50 55 60

Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn
65 70 75 80

Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Gly Gly
85 90 95

```
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val
            100                 105                 110

Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr
        115                 120                 125

Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu
    130                 135                 140

Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His
145                 150                 155                 160

Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala
                165                 170                 175

Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile
            180                 185                 190

Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser
        195                 200                 205

Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
    210                 215                 220

Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His
225                 230                 235                 240

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val
                245                 250                 255

Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
            260                 265                 270

Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
        275                 280                 285
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Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
    290                 295                 300

Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser
305                 310                 315                 320

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
                325                 330                 335

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile
            340                 345                 350

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
        355                 360                 365

Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
    370                 375                 380

Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
385                 390                 395                 400

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
                405                 410                 415

Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
            420                 425                 430

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
        435                 440                 445

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
    450                 455                 460
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<210> 3681
<211> 1443
<212> DNA

<213> Artificial sequence

<220>
<223> PD-L1 303 - CD58 3650 - Fc

<400> 3681
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accgtaacgg tccctaagga tttgtacgtg gttgagtacg ggagcaatat gacgattgaa 120

tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggaggtgg tggatcaggt 420

ggaggaggtt ccggaggagg tggatcttcc caacaaatat atggtgttgt gtatgggaat 480

gtaactttcc atgtaccaag caatgtgcct ttaaaagagg tcctatggaa aaaacaaaag 540

gataaagttg cagaactgga aaattctgaa ttcagagctt tctcatcttt taaaaatagg 600

gtttatttag acactgtgtc aggtagcctc actatctaca acttaacatc atcagatgaa 660

gatgagtatg aaatggaatc gccaaatatt actgatacca tgaagttctt tctttatgtg 720

cttgagtctg gatccggtgg aggagggtca gagcccaaaa gctccgacaa gactcacaca 780

tgccccctt gtccagcgcc tgaagctgag ggtgcgccct ctgtcttcct tttcccccct 840

aagccgaaag ataccctgat gatctcccgc actcccgaag tcacatgtgt tgttgtcgac 900

gtatctcatg aagatcctga ggtgaaattc aactggtatg tagacggggt cgaagttcat 960

aatgctaaga ctaagccacg agaagagcaa tacaactcaa cgtatcgggt ggtgagcgtt 1020

ctgacggttc tgcaccaaga ttggcttaat ggaaaagagt ataagtgcaa ggtgtccaac 1080

aaggctcttc cggcacccat cgaaaagacg atttccaaag cgaaaggcca acctagggaa 1140

ccgcaagttt acactttgcc cccgtcaaga gacgaactta ccaagaatca agtttccctg 1200

acgtgccttg tgaagggctt ctaccctagc gatatagcag ttgagtggga atctaacggc 1260

cagcccgaaa ataattataa gactactccg cccgtgctgg acagtgatgg ttcatttttc 1320

ctgtattcaa aactcactgt ggacaaatct agatggcagc agggtaatgt gttctcttgt 1380

tcagttatgc acgaggcatt gcacaatcac tatacgcaaa aaagtttgtc tctctccg 1440

ggg 1443

<210> 3682
<211> 462
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - CD58 3650 - Fc

<400> 3682

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly

```
        115                 120                 125

Gly Ser Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe
    130                 135                 140

His Val Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln
145                 150                 155                 160

Lys Asp Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser
                165                 170                 175

Ser Phe Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr
            180                 185                 190

Ile Tyr Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser
        195                 200                 205

Pro Asn Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser
    210                 215                 220

Gly Ser Gly Gly Gly Gly Ser Glu Pro Lys Ser Ser Asp Lys Thr His
225                 230                 235                 240

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Glu Gly Ala Pro Ser Val
                245                 250                 255

Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
            260                 265                 270

Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
        275                 280                 285

Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
    290                 295                 300

Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser
```

305 310 315 320

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
325 330 335

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile
340 345 350

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
355 360 365

Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
370 375 380

Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
385 390 395 400

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
405 410 415

Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
420 425 430

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
435 440 445

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
450 455 460

<210> 3683
<211> 1509
<212> DNA
<213> Artificial sequence

<220>
<223> PD-L1 303 - PD-L1 303 - CD58 3650 - CD58 3650

<400> 3683

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tgcaagttcc ccgtagagaa gcagctcgat ttggccgctt tgatagtgta ctgggaaatg 180

gaaggaaaag acatcattca attcgtccac ggtgaagagg atcaaaaagc gcaacatagc 240

tcctatagac aacgcgcacg cttgcttaaa gaccagctga gtcttggtaa cgcggcgctg 300

cagattaccg acgtaaaact tcaagacgcg ggagtttatc gctgcatgat ttcctacggg 360

ggtggcgcag actataaaag gatcactgta aaggtaaacg ccggaggtgg tggatcaggt 420

ggaggaggtt ccggaggagg tggatctttc acggttacag ttcctaagga cttgtatgta 480

gtagagtacg gctccaacat gaccatagaa tgtaagtttc ccgtagaaaa gcagttggac 540

ttggctgcgt tgatagtata ttgggaaatg gaaggcaaag atatcatcca attcgttcac 600

ggtgaagagg accaaaaggc ccagcattca agttatcgac agagggctag attgctcaaa 660

gatcagctct cccttggaaa cgcggcgttg caaataactg acgttaaact ccaagatgcc 720

ggggtctatc gatgtatgat ctcttacggt ggcggagcgg attataaacg gataaccgtc 780

aaggtgaacg ccggtggagg tggctctgga ggtggtggaa gcggtggcgg tggtagctcc 840

caacaaatat atggtgttgt gtatgggaat gtaactttcc atgtaccaag caatgtgcct 900

ttaaaagagg tcctatggaa aaaacaaaag gataaagttg cagaactgga aaattctgaa 960

ttcagagctt tctcatcttt taaaaatagg gtttatttag acactgtgtc aggtagcctc 1020

actatctaca acttaacatc atcagatgaa gatgagtatg aaatggaatc gccaaatatt 1080

actgatacca tgaagttctt tctttatgtg cttgagtctg gatccggagg gtctgggga 1140

ggcggttctg ggggtggagg ctcaagccag cagatatatg gagtagtata tggaaacgtc 1200

acttttcatg ttcctagtaa cgtacctctg aaagaagtac tttggaagaa gcagaaggat 1260

aaagtggctg aattggagaa tagcgaattt agagcttttt cctcattcaa aaatcgggtc 1320

tatcttgata cggtctcagg ctcacttact atttacaatc ttacttctag cgacgaggac 1380

gagtacgaga tggaatctcc gaatatcaca gacactatga aatttttttt gtacgtcctt 1440

gagagcggat ccggtggagg agggtcagac tataaagatg acgacgacaa acaccatcat 1500

caccatcac 1509

<210> 3684
<211> 484
<212> PRT
<213> Artificial sequence

<220>
<223> PD-L1 303 - PD-L1 303 - CD58 3650 - CD58 3650

<400> 3684

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln
35 40 45

Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg
50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
85 90 95

Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys
100 105 110

Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr

```
    130                 135                 140

Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu
145                 150                 155                 160

Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile
                165                 170                 175

Ile Gln Phe Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser
            180                 185                 190

Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
        195                 200                 205

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
    210                 215                 220

Arg Cys Met Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr
225                 230                 235                 240

Val Lys Val Asn Ala Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
                245                 250                 255

Gly Gly Gly Ser Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val
            260                 265                 270

Thr Phe His Val Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys
        275                 280                 285

Lys Gln Lys Asp Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala
    290                 295                 300

Phe Ser Ser Phe Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser
305                 310                 315                 320

Leu Thr Ile Tyr Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met
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325 330 335

Glu Ser Pro Asn Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu
340 345 350

Glu Ser Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
355 360 365

Ser Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His
370 375 380

Val Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys
385 390 395 400

Asp Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser
405 410 415

Phe Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile
420 425 430

Tyr Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro
435 440 445

Asn Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Gly
450 455 460

Ser Gly Gly Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp Lys His His
465 470 475 480

His His His His

<210> 3685
<211> 1509
<212> DNA
<213> Artificial sequence

<220>
<223> CD58 3650 - CD58 3650 - PD-L1 303 - PD-L1 303

<400> 3685
atggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt cagcgcttcc 60

caacaaatat atggtgttgt gtatgggaat gtaactttcc atgtaccaag caatgtgcct 120

ttaaaagagg tcctatggaa aaaacaaaag gataaagttg cagaactgga aaattctgaa 180

ttcagagctt tctcatcttt taaaaatagg gtttatttag acactgtgtc aggtagcctc 240

actatctaca acttaacatc atcagatgaa gatgagtatg aaatggaatc gccaaatatt 300

actgatacca tgaagttctt tctttatgtg cttgagtctg gaggtggtgg atcaggtgga 360

ggaggttccg gaggaggtgg atctagccag cagatatatg gagtagtata tggaaacgtc 420

acttttcatg ttcctagtaa cgtacctctg aaagaagtac tttggaagaa gcagaaggat 480

aaagtggctg aattggagaa tagcgaattt agagcttttt cctcattcaa aaatcgggtc 540

tatcttgata cggtctcagg ctcacttact atttacaatc ttacttctag cgacgaggac 600

gagtacgaga tggaatctcc gaatatcaca gacactatga aatttttttt gtacgtcctt 660

gagagcggtg gaggtggctc tggaggtggt ggaagcggtg gcggtggtag ctttaccgta 720

acggtcccta aggatttgta cgtggttgag tacgggagca atatgacgat tgaatgcaag 780

ttccccgtag agaagcagct cgatttggcc gctttgatag tgtactggga aatggaagga 840

aaagacatca ttcaattcgt ccacggtgaa gaggatcaaa aagcgcaaca tagctcctat 900

agacaacgcg cacgcttgct taaagaccag ctgagtcttg gtaacgcggc gctgcagatt 960

accgacgtaa aacttcaaga cgcgggagtt tatcgctgca tgatttccta cgggggtggc 1020

gcagactata aaaggatcac tgtaaaggta aacgccggat ccggagggtc tgggggaggc 1080

ggttctgggg gtggaggctc attcacggtt acagttccta aggacttgta tgtagtagag 1140

tacggctcca acatgaccat agaatgtaag tttcccgtag aaaagcagtt ggacttggct 1200

gcgttgatag tatattggga aatggaaggc aaagatatca tccaattcgt tcacggtgaa 1260

gaggaccaaa aggcccagca ttcaagttat cgacagaggg ctagattgct caaagatcag 1320

ctctcccttg gaaacgcggc gttgcaaata actgacgtta aactccaaga tgccggggtc 1380

tatcgatgta tgatctctta cggtggcgga gcggattata aacggataac cgtcaaggtg 1440

aacgccggat ccggtggagg agggtcagac tataaagatg acgacgacaa acaccatcat 1500

caccatcac 1509

<210> 3686
<211> 484
<212> PRT
<213> Artificial sequence

<220>
<223> CD58 3650 - CD58 3650 - PD-L1 303 - PD-L1 303

<400> 3686

Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val
1 5 10 15

Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp
20 25 30

Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe
35 40 45

Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr
50 55 60

Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn
65 70 75 80

Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Gly Gly
85 90 95

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Gln Gln
100 105 110

Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val Pro Ser Asn

```
        115                 120                 125

Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp Lys Val Ala
    130                 135                 140

Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe Lys Asn Arg
145                 150                 155                 160

Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr Asn Leu Thr
                165                 170                 175

Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn Ile Thr Asp
            180                 185                 190

Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Gly Gly Gly Gly Ser
        195                 200                 205

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr Val Pro
    210                 215                 220

Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile Glu Cys
225                 230                 235                 240

Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile Val Tyr
                245                 250                 255

Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly Glu Glu
            260                 265                 270

Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg Leu Leu
        275                 280                 285

Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr Asp Val
    290                 295                 300

Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr Gly Gly
```

305 310 315 320

Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Gly Ser Gly
325 330 335

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val Thr
340 345 350

Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr Ile
355 360 365

Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu Ile
370 375 380

Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His Gly
385 390 395 400

Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala Arg
405 410 415

Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile Thr
420 425 430

Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser Tyr
435 440 445

Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala Gly
450 455 460

Ser Gly Gly Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp Lys His His
465 470 475 480

His His His His

<210> 3687

<211> 1509
<212> DNA
<213> Artificial sequence

<220>
<223> CD58 3650 - PD-L1 303 - PD-L1 303 - CD58 3650

<400> 3687
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caacaaatat atggtgttgt gtatgggaat gtaactttcc atgtaccaag caatgtgcct 120

ttaaaagagg tcctatggaa aaaacaaaag gataaagttg cagaactgga aaattctgaa 180

ttcagagctt tctcatcttt taaaaatagg gtttatttag acactgtgtc aggtagcctc 240

actatctaca acttaacatc atcagatgaa gatgagtatg aaatggaatc gccaaatatt 300

actgatacca tgaagttctt tctttatgtg cttgagtctg gaggtggtgg atcaggtgga 360

ggaggttccg gaggaggtgg atcttttacc gtaacggtcc ctaaggattt gtacgtggtt 420

gagtacggga gcaatatgac gattgaatgc aagttccccg tagagaagca gctcgatttg 480

gccgctttga tagtgtactg ggaaatggaa ggaaaagaca tcattcaatt cgtccacggt 540

gaagaggatc aaaaagcgca acatagctcc tatagacaac gcgcacgctt gcttaaagac 600

cagctgagtc ttggtaacgc ggcgctgcag attaccgacg taaaacttca agacgcggga 660

gtttatcgct gcatgatttc ctacgggggt ggcgcagact ataaaaggat cactgtaaag 720

gtaaacgccg gtggaggtgg ctctggaggt ggtggaagcg gtggcggtgg tagcttcacg 780

gttacagttc ctaaggactt gtatgtagta gagtacggct ccaacatgac catagaatgt 840

aagtttcccg tagaaaagca gttggacttg gctgcgttga tagtatattg ggaaatggaa 900

ggcaaagata tcatccaatt cgttcacggt gaagaggacc aaaaggccca gcattcaagt 960

tatcgacaga gggctagatt gctcaaagat cagctctccc ttggaaacgc ggcgttgcaa 1020

ataactgacg ttaaactcca agatgccggg gtctatcgat gtatgatctc ttacggtggc 1080

ggagcggatt ataaacggat aaccgtcaag gtgaacgccg gatccggagg gtctgggggga 1140

ggcggttctg ggggtggagg ctcaagccag cagatatatg gagtagtata tggaaacgtc 1200

actttttcatg ttcctagtaa cgtacctctg aaagaagtac tttggaagaa gcagaaggat 1260

aaagtggctg aattggagaa tagcgaattt agagcttttt cctcattcaa aaatcgggtc 1320

tatcttgata cggtctcagg ctcacttact atttacaatc ttacttctag cgacgaggac 1380

gagtacgaga tggaatctcc gaatatcaca gacactatga aatttttttt gtacgtcctt 1440

gagagcggat ccggtggagg agggtcagac tataaagatg acgacgacaa acaccatcat 1500

caccatcac 1509

<210> 3688
<211> 484
<212> PRT
<213> Artificial sequence

<220>
<223> CD58 3650 - PD-L1 303 - PD-L1 303 - CD58 3650

<400> 3688

Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val
1 5 10 15

Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp
20 25 30

Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe
35 40 45

Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr
50 55 60

Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn
65 70 75 80

Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Gly Gly
85 90 95

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Val

```
            100                 105                 110

Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn Met Thr
        115                 120                 125

Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala Ala Leu
    130                 135                 140

Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe Val His
145                 150                 155                 160

Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln Arg Ala
                165                 170                 175

Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu Gln Ile
            180                 185                 190

Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met Ile Ser
        195                 200                 205

Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val Asn Ala
    210                 215                 220

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe
225                 230                 235                 240

Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser Asn
                245                 250                 255

Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu Ala
            260                 265                 270

Ala Leu Ile Val Tyr Trp Glu Met Glu Gly Lys Asp Ile Ile Gln Phe
        275                 280                 285

Val His Gly Glu Glu Asp Gln Lys Ala Gln His Ser Ser Tyr Arg Gln
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    290                 295                 300

Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala Leu
305                 310                 315                 320

Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys Met
                325                 330                 335

Ile Ser Tyr Gly Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
            340                 345                 350

Asn Ala Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
        355                 360                 365

Ser Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His
    370                 375                 380

Val Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys
385                 390                 395                 400

Asp Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser
                405                 410                 415

Phe Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile
            420                 425                 430

Tyr Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro
        435                 440                 445

Asn Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Gly
    450                 455                 460

Ser Gly Gly Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp Lys His His
465                 470                 475                 480

His His His His
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