SEQUENCE LISTING

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

<120> CD80 Variant Immunomodulatory Proteins and Uses Thereof

<130> 761612000440

<140> Not Yet Assigned
<141> Concurrently Herewith

<150> 62/323,595
<151> 2016-04-15

<150> 62/394,743
<151> 2016-09-14

<150> 62/410,844
<151> 2016-10-20

<150> 62/472,570
<151> 2017-03-16

<150> 62/475,201
<151> 2017-03-22

<160> 478

<170> PatentIn version 3.5

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

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

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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)

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

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

<400> 3

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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


<210>  4
<211>  273
<212>  PRT
<213>  Homo sapiens


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

<400>  4

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>
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<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>
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<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>
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<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
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<210> 8
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<213> Homo sapiens

<220>
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<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>
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<223>  CTLA4

<400>  9

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
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<212>  PRT
<213>  Homo sapiens


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

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

<220>
<221> MISC_FEATURE
<223> CD4

<400> 13

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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

<210> 55
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v1 ECD

<400> 55

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 56
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v2 ECD

<400> 56

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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>  57
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v3 ECD

<400>  57

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 58
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v4 ECD

<400> 58

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> 59
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v5 ECD

<400> 59

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 60
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v6 ECD

<400> 60

```
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> 61
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v7 ECD

<400> 61

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 62
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v8 ECD

<400> 62

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 63
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v9 ECD

<400> 63

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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>  64
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v10 ECD

<400>  64

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 65
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v11 ECD

<400> 65

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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>  66
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v12 ECD

<400>  66

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 67
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v13 ECD

<400> 67

```
Val Ile His Val Thr Lys Glu 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> 68
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v14 ECD

<400> 68

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 69
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v15 ECD

<400> 69

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 70
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v16 ECD

<400> 70

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 71
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v17 ECD

<400> 71

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  72
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v18 ECD

<400>  72

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  73
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v19 ECD

<400>  73

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 74
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v20 ECD

<400> 74

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 75
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v21 ECD

<400> 75

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  76
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v22 ECD

<400>  76

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  77
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v23 ECD

<400>  77

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 78
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v24 ECD

<400> 78

Val Ile His Val Thr Lys Glu Val 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>  79
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v25 ECD

<400>  79

Val Ile His Val Thr Lys Glu Val Lys Glu 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>  80
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v26 ECD

<400>  80

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 81
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v27 ECD

<400> 81

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 82
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v28 ECD

<400> 82

```
Val Ile His Val Thr Lys Glu Val 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> 83
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v29 ECD

<400> 83

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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>  84
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v30 ECD

<400>  84

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 85
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v31 ECD

<400> 85

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 86
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v32 ECD

<400> 86

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 87
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v33 ECD

<400> 87

Val 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> 88
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v34 ECD

<400> 88

```
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> 89
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v35 ECD

<400> 89

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 90
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v36 ECD

<400> 90

Val Ile His 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>  91
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v37 ECD

<400>  91

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 92
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v38 ECD

<400> 92

Val Ile His Val Thr Lys Glu Val 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>  93
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v39 ECD

<400>  93

Val Ile His Val Thr Lys Glu Val 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> 94
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v40 ECD

<400> 94

```
Val Ile His Val Thr Lys Glu Val 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> 95
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v41 ECD

<400> 95

```
Val Ile His 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>  96
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v42 ECD

<400>  96

Val Ile His Val Thr Lys Glu Val 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> 97
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v43 ECD

<400> 97

Val Ile His Val Thr Lys Glu Val 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> 98
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v44 ECD

<400> 98

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  99
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v45 ECD

<400>  99

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  100
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v46 ECD

<400>  100

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 101
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v47 ECD

<400> 101

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 102
<211> 208

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v48 ECD

<400> 102

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  103
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v49 ECD

<400>  103

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  104
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v50 ECD

<400>  104

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 105
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v51 ECD

<400> 105

Val Ile His Val Thr Lys Glu Val 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>  106
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v52 ECD

<400>  106

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>  107
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v53 ECD

<400>  107

Val Ile His Val Thr Lys Glu Val 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> 108
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v54 ECD

<400> 108

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 109
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v1 ECD

<400> 109

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  110
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v2 ECD

<400>  110

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  111
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v3 ECD

<400>  111

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 112
<211> 238
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v4 ECD

<400> 112

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 113
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v5 ECD

<400> 113

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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>  114
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v6 ECD

<400>  114

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


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

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> 115
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v7 ECD

<400> 115

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

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  116
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v8 ECD

<400>  116

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 117
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v9 ECD

<400> 117

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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>  118
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v10 ECD

<400>  118

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 119
<211> 238

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v11 ECD

<400> 119

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  120
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v12 ECD

<400>  120

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  121
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v13 ECD

<400>  121

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 122
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v14 ECD

<400> 122

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 123
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v15 ECD

<400> 123

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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>  124
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v16 ECD

<400>  124

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 125
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v17 ECD

<400> 125

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

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 126
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v18 ECD

<400> 126

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  127
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v19 ECD

<400>  127

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  128
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v20 ECD

<400>  128

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 129
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v21 ECD

<400> 129

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 130
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v22 ECD

<400> 130

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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> 131
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v23 ECD

<400> 131

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 132
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v24 ECD

<400> 132

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 133
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v25 ECD

<400> 133

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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> 134
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v26 ECD

<400> 134

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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> 135
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v27 ECD

<400> 135

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 136
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v28 ECD

<400> 136

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  137
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v29 ECD

<400>  137

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 138
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v30 ECD

<400> 138

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 139
<211> 238
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL v31 ECD

<400> 139

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 140
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v32 ECD

<400> 140

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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>  141
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v33 ECD

<400>  141

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  142
<211>  238
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v34 ECD

<400>  142

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

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 143
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v1 ECD

<400> 143

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> 144
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v2 ECD

<400> 144

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> 145
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v3 ECD

<400> 145

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> 146
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v4 ECD

<400> 146

```
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>  147
<211>  117
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  NKp30 v5 ECD

<400>  147

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>  148
<211>  224
```

<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v1 ECD

<400> 148

```
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> 149
<211> 224
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v2 ECD

<400> 149

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>  150
<211>  224
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD86 v3 ECD

<400>  150

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> 151
<211> 224
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v4 ECD

<400> 151

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> 152
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 WT IgV

<400> 152

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 153
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v1 IgV

<400> 153

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 154
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v20 IgV

<400> 154

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 155
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v6 IgV

<400> 155

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> 156
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v7 IgV

<400> 156

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 157
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v9 IgV

<400> 157

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 158
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v10 IgV

<400> 158

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 159
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v11 IgV

<400> 159

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 160
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v12 IgV

<400> 160

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 161
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v13 IgV

<400> 161

Val Ile His Val Thr Lys Glu 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> 162
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v14 IgV

<400> 162

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 163
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v15 IgV

<400> 163

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 164
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v16 IgV

<400> 164

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 165
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v17 IgV

<400> 165

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 166
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v19 IgV

<400> 166

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 167
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v21 IgV

<400> 167

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 168
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v22 IgV

<400> 168

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 169
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v23 IgV

<400> 169

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  170
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v24 IgV

<400>  170

Val Ile His Val Thr Lys Glu Val 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>  171
<211>  101
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v25 IgV

<400>  171

Val Ile His Val Thr Lys Glu Val Lys Glu 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>  172
<211>  101
<212>  PRT
<213>  Artificial Sequence
```

<220>
<223> CD80 v26 IgV

<400> 172

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 173
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v27 IgV

<400> 173

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 174
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v28 IgV

<400> 174

```
Val Ile His Val Thr Lys Glu Val 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> 175
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v30 IgV

<400> 175

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 176
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v32 IgV

<400> 176

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 177
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v33 IgV

<400> 177

Val 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> 178
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v34 IgV

<400> 178

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> 179
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v35 IgV

<400> 179

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 180
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v36 IgV

<400> 180

Val Ile His 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> 181
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v37 IgV

<400> 181

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 182
<211> 101

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v38 IgV

<400> 182

Val Ile His Val Thr Lys Glu Val 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> 183
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v40 IgV

<400> 183

Val Ile His Val Thr Lys Glu Val 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> 184
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v41 IgV

<400> 184

```
Val Ile His 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> 185
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v43 IgV

<400> 185

Val Ile His Val Thr Lys Glu Val 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> 186
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v44 IgV

<400> 186

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 187
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v45 IgV

<400> 187

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 188
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v47 IgV

<400> 188

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 189
<211> 101
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v48 IgV

<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 Asp Arg Lys Gly Tyr Arg Arg Glu His
                85                  90                  95


Leu Ala Glu Val Thr
            100
```

<210> 190
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v49 IgV

<400> 190

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 191
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v50 IgV

<400> 191

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 192
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v51 IgV

<400> 192

Val Ile His Val Thr Lys Glu Val 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> 193
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v52 IgV

<400> 193

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> 194
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v53 IgV

<400> 194

Val Ile His Val Thr Lys Glu Val 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> 195
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v54 IgV

<400> 195

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 196
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL WT IgV

<400> 196

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  197
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v1 IgV

<400>  197

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  198
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v2 IgV

<400>  198

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  199
<211>  111
<212>  PRT
<213>  Artificial Sequence
```

<220>
<223> ICOSL v3 IgV

<400> 199

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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> 200
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v4 IgV

<400> 200

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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>  201
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v5 IgV

<400>  201

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 202
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v10 IgV

<400> 202

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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> 203
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v11 IgV

<400> 203

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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> 204
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v12 IgV

<400> 204

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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> 205
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v13 IgV

<400> 205

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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> 206
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v14 IgV

<400> 206

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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> 207
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v22 IgV

<400> 207

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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>  208
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v23 IgV

<400>  208

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  209
<211>  111
```

<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v24 IgV

<400> 209

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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> 210
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v28 IgV

<400> 210

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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>  211
<211>  111
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  ICOSL v30 IgV

<400>  211

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


Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 212
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v33 IgV

<400> 212

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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> 213
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v34 IgV

<400> 213

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

```
Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 214
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> NKp30 WT IgC-like

<400> 214

```
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> 215
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v1 IgC-like

<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 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> 216
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v2 IgC-like

<400> 216

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> 217
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v3 IgC-like

<400> 217

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> 218
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v4 IgC-like

<400> 218

```
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> 219
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v5 IgC-like

<400> 219

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> 220
<211> 99
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD86 WT IgV

<400> 220

Asn Glu Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln
1 5 10 15

```
Ser Leu Ser Glu Leu Val Val Phe Trp Gln Asp Gln Glu Asn Leu Val
            20                  25                  30

Leu Asn Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser
        35                  40                  45

Lys Tyr Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg
    50                  55                  60

Leu His Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile
65                  70                  75                  80

His His Lys Lys Pro Thr Gly Met Ile Arg Ile His Gln Met Asn Ser
                85                  90                  95

Glu Leu Ser
```

<210> 221
<211> 99
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v1 IgV

<400> 221

```
Asn Glu Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln
1               5                   10                  15

Ser Leu Ser Glu Leu Val Val Phe Trp His Asp Gln Glu Asn Leu Val
            20                  25                  30

Leu Asn Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser
        35                  40                  45

Lys Tyr Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg
    50                  55                  60

Leu His Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile
65                  70                  75                  80
```

Leu His Lys Lys Pro Thr Gly Met Ile Arg Ile His His Met Asn Ser
85 90 95

Glu Leu Ser

<210> 222
<211> 99
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v2 IgV

<400> 222

Asn Glu Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln
1 5 10 15

Ser Leu Ser Glu Leu Val Val Phe Trp His Asp Gln Glu Asn Leu Val
20 25 30

Leu Asn Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser
35 40 45

Lys Tyr Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg
50 55 60

Leu His Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile
65 70 75 80

His His Lys Lys Pro Thr Gly Met Ile Arg Ile His Gln Met Asn Ser
85 90 95

Glu Leu Ser

<210> 223
<211> 99
<212> PRT
<213> Artificial Sequence

<220>

<223> CD86 v3 IgV

<400> 223

```
Asn Glu Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln
1               5                  10                  15


Ser Leu Ser Glu Leu Val Val Phe Trp Gln Asp Gln Glu Asn Leu Val
            20                  25                  30


Leu Asn Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser
        35                  40                  45


Lys Tyr Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg
    50                  55                  60


Leu His Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile
65                  70                  75                  80


Leu His Lys Lys Pro Thr Gly Met Ile Arg Ile His Gln Met Asn Ser
                85                  90                  95


Glu Leu Ser
```

<210> 224
<211> 99
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 v4 IgV

<400> 224

```
Asn Glu Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln
1               5                  10                  15


Ser Leu Ser Glu Leu Val Val Phe Trp Gln Asp Gln Glu Asn Leu Val
            20                  25                  30


Leu Asn Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser
        35                  40                  45
```

Lys Tyr Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg
    50   55   60

Leu His Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile
65   70   75   80

His His Lys Lys Pro Thr Gly Met Ile Arg Ile His His Met Asn Ser
                85   90   95

Glu Leu Ser

<210> 225
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> VH signal peptide

<400> 225

Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly
1   5   10   15

Val Ser Ala

<210> 226
<211> 232
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> IgG1 Fc

<400> 226

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> 227
<211> 235
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> IgG2 Fc

<400> 227

```
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> 228
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> IgV-IgV linker

<400> 228

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 229
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> IgV-Fc linker 1

<400> 229

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 230
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> IgV-Fc linker 2

<400> 230

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Ala Ala
1 5 10

<210> 231
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 WT linker 1

<400> 231

Lys Ala Asp Phe Pro Thr Pro Ser Ile Ser Asp Phe Glu Ile Pro
1 5 10 15

<210> 232
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 WT linker 2

<400> 232

Thr Thr Lys Gln Glu His Phe Pro Asp Asn
1 5 10

<210> 233
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL WT linker 1

<400> 233

Val Thr Leu His Val Ala Ala Asn Phe Ser Val
1 5 10

<210> 234
<211> 29
<212> PRT
<213> Artificial Sequence

<220>

<223> ICOSL WT linker 2

<400> 234

Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp Lys Ile Thr
1   5   10   15

Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
            20   25

<210> 235
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 WT linker 1

<400> 235

Val Glu Lys Glu His Pro Gln Leu Gly
1   5

<210> 236
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 WT linker 1

<400> 236

Ala Pro Leu Lys Ile Gln Ala Tyr Phe
1   5

<210> 237
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 WT linker 2

<400> 237

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

Thr Glu

<210> 238
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> CD86 WT linker 3

<400> 238

Arg Leu Leu Ser Ser Pro Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro
1   5   10   15

Pro Pro Asp His Ile Pro
            20

<210> 239
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v35 ECD

<400> 239

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20   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> 240
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v35 IgV

<400> 240

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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> 241
<211> 254
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80-TIP I67T/L70Q/A91G/T120S

<400> 241

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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

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> 242
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> CD80-TIP I67T/L70Q/A91G/T120S

<400> 242
atgggccaca cacggaggca gggaacatca ccatccaagt gtccatacct caatttcttt 60

cagctcttgg tgctggctgg tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120

gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180

caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240

atgaatatat ggcccgagta caagaaccgg accatctttg atatcactaa taacctctcc 300

acagtgatcc aagctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360

tatgaaaaag acggcttcaa gcgggaacac ctggctgaag tgacgttatc agtcaaagct 420

gacttcccta cacctagtat atctgacttt gaaattccat cttctaatat tagaaggata 480

atttgctcaa cctctggagg ttttccagag cctcacctct cctggttgga aaatggagaa 540

gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatgctgtt 600

agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660

ggacatttaa gagtgaatca gaccttcaac tggaatacaa ccaagcaaga gcattttcct 720

gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780

tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840

agaagggaaa gtgtacgccc tgtataa 867

<210> 243
<211> 284
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL-TIP N52H/I143T

<400> 243

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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 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> 244
<211> 909
<212> DNA
<213> Artificial Sequence

<220>
<223> ICOSL-TIP N52H/I143T

<400> 244
atgcggctgg gcagtcctgg actgctcttc ctgctcttca gcagccttcg agctgatact 60

caggagaagg aagtcagagc gatggtaggc agcgacgtgg agctcagctg cgcttgccct 120

gaaggaagcc gttttgattt aaatgatgtt tacgtatatt ggcaaaccag tgagtcgaaa 180

accgtggtga cctaccacat cccacagcac agctccttgg aaaacgtgga cagccgctac 240

cggaaccgag ccctgatgtc accggccggc atgctgcggg gcgacttctc cctgcgcttg 300

ttcaacgtca ccccccagga cgagcagaag tttcactgcc tggtgttgag ccaatccctg 360

ggattccagg aggttttgag cgttgaggtt acactgcatg tggcagcaaa cttcagcgtg 420

cccgtcgtca gcgcccccca cagcccctcc caggatgagc tcaccttcac gtgtacatcc 480

accaacggct accccaggcc caacgtgtac tggatcaata agacggacaa cagcctgctg 540

gaccaggctc tgcagaatga caccgtcttc ttgaacatgc ggggcttgta tgacgtggtc 600

agcgtgctga ggatcgcacg gacccccagc gtgaacattg gctgctgcat agagaacgtg 660

cttctgcagc agaacctgac tgtcggcagc cagacaggaa atgacatcgg agagagagac 720

aagatcacag agaatccagt cagtaccggc gagaaaaacg cggccacgtg gagcatcctg 780

gctgtcctgt gcctgcttgt ggtcgtggcg gtggccatag gctgggtgtg cagggaccga 840

tgcctccaac acagctatgc aggtgcctgg gctgtgagtc cggagacaga gctcactggc 900

cacgtttga 909

<210> 245
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<223> Anti-CD19 scFv

<400> 245

```
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> 246
<211> 71
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8-derived hinge and transmembrane domain

<400> 246

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> 247
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> CD3zeta intracellular signaling domain

<400> 247

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> 248
<211> 1356
<212> DNA
<213> Artificial Sequence

<220>
<223> AntiCD19x8z chimeric antigen receptor

<220>
<221> misc_feature
<223> antiCD19x8z chimeric antigen receptor

nucleotide

<400> 248

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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> 249
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> T2A

<400> 249
ggcagtggcg agggcagagg aagtctgcta acatgcggtg acgtcgagga gaatcctggc 60

cca 63

<210> 250
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> T2A

<400> 250

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> 251
<211> 867
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> CD80

<400> 251
atgggccaca cacggaggca gggaacatca ccatccaagt gtccatacct caatttcttt 60

cagctcttgg tgctggctgg tctttctcac ttctgttcag gtgttatcca cgtgaccaag 120

gaagtgaaag aagtggcaac gctgtcctgt ggtcacaatg tttctgttga agagctggca 180

caaactcgca tctactggca aaaggagaag aaaatggtgc tgactatgat gtctggggac 240

atgaatatat ggcccgagta caagaaccgg accatctttg atatcactaa taacctctcc 300

attgtgatcc tggctctgcg cccatctgac gagggcacat acgagtgtgt tgttctgaag 360

tatgaaaaag acgctttcaa gcgggaacac ctggctgaag tgacgttatc agtcaaagct 420

gacttcccta cacctagtat atctgacttt gaaattccaa cttctaatat tagaaggata 480

atttgctcaa cctctggagg ttttccagag cctcacctct cctggttgga aaatggagaa 540

gaattaaatg ccatcaacac aacagtttcc caagatcctg aaactgagct ctatgctgtt 600

agcagcaaac tggatttcaa tatgacaacc aaccacagct tcatgtgtct catcaagtat 660

ggacatttaa gagtgaatca gaccttcaac tggaatacaa ccaagcaaga gcattttcct 720

gataacctgc tcccatcctg ggccattacc ttaatctcag taaatggaat ttttgtgata 780

tgctgcctga cctactgctt tgccccaaga tgcagagaga gaaggaggaa tgagagattg 840

agaagggaaa gtgtacgccc tgtataa 867

<210> 252

<211> 909
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> ICOSL

<400> 252
atgcggctgg gcagtcctgg actgctcttc ctgctcttca gcagccttcg agctgatact 60

caggagaagg aagtcagagc gatggtaggc agcgacgtgg agctcagctg cgcttgccct 120

gaaggaagcc gttttgattt aaatgatgtt tacgtatatt ggcaaaccag tgagtcgaaa 180

accgtggtga cctaccacat cccacagaac agctccttgg aaaacgtgga cagccgctac 240

cggaaccgag ccctgatgtc accggccggc atgctgcggg gcgacttctc cctgcgcttg 300

ttcaacgtca ccccccagga cgagcagaag tttcactgcc tggtgttgag ccaatccctg 360

ggattccagg aggttttgag cgttgaggtt acactgcatg tggcagcaaa cttcagcgtg 420

cccgtcgtca gcgcccccca cagcccctcc caggatgagc tcaccttcac gtgtacatcc 480

ataaacggct accccaggcc caacgtgtac tggatcaata agacggacaa cagcctgctg 540

gaccaggctc tgcagaatga caccgtcttc ttgaacatgc ggggcttgta tgacgtggtc 600

agcgtgctga ggatcgcacg gacccccagc gtgaacattg gctgctgcat agagaacgtg 660

cttctgcagc agaacctgac tgtcggcagc cagacaggaa atgacatcgg agagagagac 720

aagatcacag agaatccagt cagtaccggc gagaaaaacg cggccacgtg gagcatcctg 780

gctgtcctgt gcctgcttgt ggtcgtggcg gtggccatag gctgggtgtg cagggaccga 840

tgcctccaac acagctatgc aggtgcctgg gctgtgagtc cggagacaga gctcactggc 900

cacgtttga 909

<210> 253
<211> 254
<212> PRT
<213> Homo sapiens

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

<400> 253

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  254
<211>  306
<212>  PRT
<213>  Homo sapiens

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

<400>  254

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> 255
<211> 272
<212> PRT
<213> Homo sapiens

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

<400> 255

```
Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
1               5                   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> 256
<211> 254
<212> PRT
<213> Homo sapiens

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

<400> 256

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> 257
<211> 284
<212> PRT
<213> Homo sapiens

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

<400> 257

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
            20                  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>  258
<211>  506
<212>  PRT
<213>  Homo sapiens


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

<400>  258

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> 259
<211> 258
<212> PRT

<213> Homo sapiens

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

<400> 259

```
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> 260
<211> 202
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD28

<400> 260

```
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> 261
<211> 188
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CTLA4

<400> 261

```
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>  262
<211>  268
<212>  PRT
<213>  Homo sapiens


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

<400>  262

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> 263
<211> 179
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature ICOS

<400> 263

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> 264
<211> 259
<212> PRT
<213> Homo sapiens

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

<400> 264

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> 265
<211> 433
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD4

<400> 265

```
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> 266
<211> 214
<212> PRT
<213> Homo sapiens

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

<400> 266

```
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> 267
<211> 189
<212> PRT
<213> Homo sapiens

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

<400> 267

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> 268
<211> 497
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature LAG3

<400> 268

```
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> 269
<211> 280
<212> PRT
<213> Homo sapiens

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

<400> 269

```
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> 270
<211> 492
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CEACAM1

<400> 270

```
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> 271
<211> 222
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature TIGIT

<400> 271

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> 272
<211> 397
<212> PRT
<213> Homo sapiens

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

<400> 272

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>  273
<211>  507
<212>  PRT
<213>  Homo sapiens


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

<400>  273

Gln Asp Val Arg Val Gln Val 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> 274
<211> 318
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD226

<400> 274

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> 275
<211> 327
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD2

<400> 275

```
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> 276
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature CD160

<400> 276

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>  277
<211>  248
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  Mature CD200

<400>  277

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> 278
<211> 297
<212> PRT
<213> Homo sapiens

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

<400> 278

```
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>  279
<211>  183
<212>  PRT
<213>  Homo sapiens


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

<400>  279

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> 280
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v55 ECD

<400> 280

Val Ile His Val Thr Lys Glu Val 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>  281
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v56 ECD

<400>  281

Val Ile His Val Thr Lys Glu Val 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> 282
<211> 208
<212> PRT

<213> Artificial Sequence

<220>
<223> CD80 v57 ECD

<400> 282

```
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>  283
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v58 ECD

<400>  283

Val Ile His Val Thr Lys Glu Val 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> 284
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v59 ECD

<400> 284

Val Ile His Val Thr Lys Glu Val 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> 285
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v60 ECD

<400> 285

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> 286
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v61 ECD

<400> 286

Val Ile His Val Thr Lys Glu Val 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>  287
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v62 ECD

<400>  287

Val Ile His Val Thr Lys Glu Val 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> 288
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v63 ECD

<400> 288

```
Val Ile His Val Thr Lys Glu Val 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> 289

<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v64 ECD

<400> 289

```
Val Ile His Val Thr Lys Glu Val 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> 290
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v65 ECD

<400> 290

Val Ile His Val Thr Lys Glu Val 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> 291
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v66ECD

<400> 291

Val Ile His Val Thr Lys Glu Val 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>  292
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v67 ECD

<400>  292

Val Ile His Val Thr Lys Glu Val 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> 293
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v68 ECD

<400> 293

Val Ile His Val Thr Lys Glu Val 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>  294
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v69 ECD

<400>  294

Val Ile His Val Thr Lys Glu Val 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>  295
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v70 ECD
```

<400> 295

```
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> 296
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v71 ECD

<400> 296

```
Val Ile His Val Thr Lys Glu Val 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> 297
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v72 ECD

<400> 297

Val Ile His Val Thr Lys Glu Val 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> 298
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v73 ECD

<400> 298

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> 299
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v74 ECD

<400> 299

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> 300
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v75 ECD

<400> 300

Val Ile His Val Thr Lys Glu Val 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> 301
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v76 ECD

<400> 301

```
Val Ile His Val Thr Lys Glu Val 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> 302
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v77 ECD

<400> 302

```
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> 303
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v78 ECD

<400> 303

Val Ile His Val Thr Lys Glu Val 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> 304
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v79 ECD

<400> 304

```
Val Ile His Val Thr Lys Glu Val 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> 305
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v80 ECD

<400> 305

Val Ile His Val Thr Lys Glu Val 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> 306
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v81 ECD

<400> 306

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> 307
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v82 ECD

<400> 307

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>  308
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v83 ECD

<400>  308

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> 309
<211> 208
<212> PRT

<213> Artificial Sequence

<220>
<223> CD80 v84 ECD

<400> 309

```
Val Ile His Val Thr Lys Glu Val 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> 310
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v85 ECD

<400> 310

Val Ile His Val Thr Lys Glu Val 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> 311
<211> 207
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v86 ECD

<400> 311

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser 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> 312
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v87 ECD

<400> 312

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 313
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v88 ECD

<400> 313

Val Ile His Val Thr Lys Glu Val 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>  314
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v89 ECD

<400>  314

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>  315
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v90 ECD

<400>  315
```

```
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> 316

<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v91 ECD

<400> 316

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 317
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v92 ECD

<400> 317

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> 318
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v93 ECD

<400> 318

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>  319
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v94 ECD

<400>  319

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> 320
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v95 ECD

<400> 320

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>  321
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v96 ECD

<400>  321

Val Ile His Val Thr Lys Glu Val 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>  322
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v97 ECD
```

<400> 322

```
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> 323
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v98 ECD

<400> 323

```
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> 324
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v99 ECD

<400> 324

Val Ile His Val Thr Lys Glu Val 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> 325
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v100 ECD

<400> 325

Val 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> 326
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v101 ECD

<400> 326

Val Ile His Val Thr Lys Glu Val 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>  327
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v102 ECD

<400>  327

Val 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> 328
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v103 ECD

<400> 328

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 329
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v104 ECD

<400> 329

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 330
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v105 ECD

<400> 330

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 331
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v106 ECD

<400> 331

```
Val Ile His Val Thr Lys Glu Val Lys Glu 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> 332
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v107 ECD

<400> 332

Val Ile His Val Thr Lys Glu 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> 333
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v108 ECD

<400> 333

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> 334
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v109 ECD

<400> 334

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>  335
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v110 ECD

<400>  335

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> 336
<211> 208
<212> PRT

<213> Artificial Sequence

<220>
<223> CD80 v111 ECD

<400> 336

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>  337
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v112 ECD

<400>  337

Val Ile His Val Thr Lys Glu Val 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> 338
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v113 ECD

<400> 338

Val Ile His Val Thr Lys Glu Val 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> 339
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v114 ECD

<400> 339

Val 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>  340
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v115 ECD

<400>  340

Val Ile His Val Thr Lys Glu Val 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>  341
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v116 ECD

<400>  341

Val Ile His Val Thr Lys Glu Val 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> 342
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v117 ECD

<400> 342

```
Val Ile His Val Thr Lys Glu Val 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> 343

<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v118 ECD

<400> 343

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 344
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v119 ECD

<400> 344

Val Ile His Val Thr Lys 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> 345
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v120 ECD

<400> 345

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 346
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v121 ECD

<400> 346

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> 347
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v93 IgV

<400> 347

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>  348
<211>  414
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  VSIG8

<400>  348

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> 349
<211> 393
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Mature VSIG8

<400> 349

```
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>  350
<211>  242
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<223>  VSIG8 ECD

<400>  350

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> 351
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> CD33 Signal Peptide

<400> 351

Met Pro Leu Leu Leu Leu Leu Pro Leu Leu Trp Ala Gly Ala Leu Ala
1   5   10   15

<210> 352
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> IgGkappa light chain

<400> 352

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> 353
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> HSA signal peptide

<400> 353

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1   5   10   15

Tyr Ser

<210> 354
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Ig kappa light chain

<400> 354

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> 355
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Human azurocidin preprotein signal sequence

<400> 355

Met Thr Arg Leu Thr Val Leu Ala Leu Leu Ala Gly Leu Leu Ala Ser
1   5   10   15

Ser Arg Ala

<210> 356
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 356

Met Glu Leu Gly Leu Ser Trp Ile Phe Leu Leu Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys

<210> 357
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 357

Met Glu Leu Gly Leu Arg Trp Val Phe Leu Val Ala Ile Leu Glu Gly
1 5 10 15

Val Gln Cys

<210> 358
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 358

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
1 5 10 15

Val Leu Ser

<210> 359
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 359

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
1 5 10 15

Ala His Ser

<210> 360
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 360

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
1 5 10 15

Val Gln Ser

<210> 361
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 361

Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys

<210> 362
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 362

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Phe Arg Gly
1 5 10 15

Val Gln Cys

<210> 363
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG heavy chain signal peptide

<400> 363

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> 364
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG Kappa light chain signal sequences

<400> 364

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> 365
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG Kappa light chain signal sequences

<400> 365

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> 366
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Gaussia luciferase

<400> 366

Met Gly Val Lys Val Leu Phe Ala Leu Ile Cys Ile Ala Val Ala Glu
1 5 10 15

Ala

<210> 367
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Human albumin

<400> 367

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser

<210> 368
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Human chymotrypsinogen

<400> 368

Met Ala Phe Leu Trp Leu Leu Ser Cys Trp Ala Leu Leu Gly Thr Thr
1 5 10 15

Phe Gly

<210> 369
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Human interleukin-2

<400> 369

Met Gln Leu Leu Ser Cys Ile Ala Leu Ile Leu Ala Leu Val
1 5 10

<210> 370
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Human trypsinogen-2

<400> 370

Met Asn Leu Leu Leu Ile Leu Thr Phe Val Ala Ala Ala Val Ala
1 5 10 15

<210> 371
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 trailing sequence

<400> 371

Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser Ile Ser Asp Phe Glu
1 5 10 15

Ile Pro

<210> 372
<211> 107
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> CD80 IgV wildtype

<400> 372

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 373
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v46 IgV

<400> 373

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 374
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v1 IgV

<400> 374

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 375
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v20 IgV

<400> 375

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  376
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v43 IgV

<400>  376

Val Ile His Val Thr Lys Glu Val 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>  377
<211>  107
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v44 IgV

<400>  377

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  378
<211>  107
<212>  PRT
```

<213> Artificial Sequence

<220>
<223> CD80 v18 IgV

<400> 378

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 379
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v48 IgV

<400> 379

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 380
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v49 IgV

<400> 380

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 381
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v50 IgV

<400> 381

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 382
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v53 IgV

<400> 382

Val Ile His Val Thr Lys Glu Val 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> 383
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v54 IgV

<400> 383

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 384
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v93 IgV

<400> 384

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> 385
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v19 IgV

<400> 385

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 386
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v29 IgV

<400> 386

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 387
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Knob Fc

<400> 387

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>  388
<211>  232
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Hole Fc

<400>  388

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>  389
<211>  232
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Stack Fc (homodimeric)
```

<400> 389

```
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> 390
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Stuffer

<400> 390

His Met Ser Ser Val Ser Ala Gln
1   5

<210> 391
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 WT linker 1 (including first 3 aa)

<400> 391

Leu Ser Val Lys Ala Asp Phe Pro Thr Pro Ser Ile Ser Asp Phe Glu
1   5   10   15

Ile Pro

<210> 392
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Fc (C5S (C220S), R77C, (R292C), N82G (N297G), V87C (V302C))

<400> 392

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> 393
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Fc with C220S/L234A/L235E/G237A

<400> 393

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>  394
<211>  231
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Fc with C220S/E233P/L234V/L235A/G236del/S267K

<400>  394

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>  395
<211>  431
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  antiCD19x28z chimeric antigen receptor: protein

<400>  395

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> 396
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8-derived signal sequence

<400> 396

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> 397
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8-derived signal sequence

<400> 397

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> 398
<211> 245
<212> PRT
<213> Artificial Sequence

<220>
<223> anti-CD19 scFv (2nd gen CAR)

<400> 398

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> 399
<211> 69
<212> PRT
<213> Artificial Sequence

<220>
<223> CD8-derived hinge and transmembrane domain (2nd gen CAR)

<400> 399

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> 400
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> 4-1BB-derived costimulatory domain

<400> 400

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> 401
<211> 40
<212> PRT
<213> Artificial Sequence

<220>
<223> CD28-derived costimulatory domain

<400> 401

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> 402
<211> 41
<212> PRT
<213> Artificial Sequence

<220>
<223> CD28-derived costimulatory domain 2

<400> 402

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> 403
<211> 44
<212> PRT
<213> Artificial Sequence

<220>
<223> CD28-derived costimulatory domain 3

<400> 403

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> 404
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> T2A protein

<400> 404

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> 405
<211> 232
<212> PRT
<213> Artificial Sequence

<220>
<223> Blue fluorescent protein

<400> 405

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>  406
<211>  472
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  2nd Gen CAR (without signal sequence or T2A or BFP)

<400>  406

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> 407
<211> 497
<212> PRT
<213> Artificial Sequence

<220>
<223> 2nd Gen CAR with T2A

<400> 407

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> 408
<211> 471
<212> PRT
<213> Artificial Sequence

<220>
<223> 2nd Gen CAR with CD28-derived costimulatory domain (without signal sequence or T2A or BFP)

<400> 408

```
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> 409
<211> 270
<212> PRT
<213> Artificial Sequence

<220>
<223> Nkp30 stack

<400> 409

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

Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val
20 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> 410
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> NKp30 v1 IgC-like (long)

<400> 410

```
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> 411
<211> 229
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG4 Fc

<400> 411

```
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> 412
<211> 229
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG4 Fc S228P

<400> 412

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> 413
<211> 232
<212> PRT
<213> Artificial Sequence

<220>

<223> IgG1 Fc C220S

<400> 413

```
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> 414
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v122 ECD

<400> 414

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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>  415
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v123 ECD

<400>  415

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  416
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v124 ECD

<400>  416

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>  417
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v125 ECD

<400>  417

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 418
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v126 ECD

<400> 418

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 419
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v127 ECD

<400> 419

```
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> 420
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v128 ECD

<400> 420

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 421
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v129 ECD

<400> 421

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 422
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v130 ECD

<400> 422

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  423
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v131 ECD

<400>  423

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  424
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v132 ECD

<400>  424

Val Ile His Val Thr Lys Glu 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>  425
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v133 ECD

<400>  425
```

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  426
<211>  208
```

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v134 ECD

<400> 426

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 427
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v135 ECD

<400> 427

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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>  428
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v136 ECD

<400>  428

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  429
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v137 ECD

<400>  429

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  430
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v138 ECD

<400>  430

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  431
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v139 ECD

<400>  431

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 432
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v140 ECD

<400> 432

Val Ile His Val Thr Lys Glu Val Lys Glu 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> 433
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v141 ECD

<400> 433

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  434
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v142 ECD

<400>  434

Val Ile His Val Thr Lys Glu Val 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>  435
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v143 ECD

<400>  435

Val Ile His Val Thr Lys Glu Val 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> 436
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v144 ECD

<400> 436

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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>  437
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v145 ECD

<400>  437

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  438
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v146 ECD

<400>  438

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 439
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v147 ECD

<400> 439

```
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> 440
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v148 ECD

<400> 440

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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>  441
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v149 ECD

<400>  441

Val Ile His 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>  442
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v150 ECD

<400>  442

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 443
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v151 ECD

<400> 443

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1   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> 444
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v152 ECD

<400> 444

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 445
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v153 ECD

<400> 445

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 446
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v154 ECD

<400> 446

```
Val Ile His Val Thr Lys Glu Val 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> 447
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v155 ECD

<400> 447

Val Ile His Val Thr Lys Glu Val 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> 448
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v156 ECD

<400> 448

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> 449
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v157 ECD

<400> 449

```
Val Ile His Val Thr Lys Glu Val 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>  450
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v158 ECD

<400>  450

Val Ile His Val Thr Lys Glu Val 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>  451
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v159 ECD

<400>  451

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> 452
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v160 ECD

<400> 452

```
Val Ile His Val Thr Lys Glu Val 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>  453
<211>  208
```

<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v161 ECD

<400> 453

```
Val Ile His Val Thr Lys Glu Val 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> 454
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v162 ECD

<400> 454

Val Ile His Val Thr Lys Glu Val 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> 455
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v163 ECD

<400> 455

Val Ile His Val Thr Lys Glu Val 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> 456
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v164 ECD

<400> 456

Val Ile His Val Thr Lys Glu Val 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> 457
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v165 ECD

<400> 457

Val Ile His Val Thr Lys Glu Val 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>  458
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v166 ECD

<400>  458

Val Ile His Val Thr Lys Glu Val 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> 459
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v167 ECD

<400> 459

Val Ile His Val Thr Lys Glu Val 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> 460
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v168 ECD

<400> 460

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>  461
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v169 ECD

<400>  461

Val Ile His Val Thr Lys Glu Val 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>  462
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v170 ECD

<400>  462

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> 463
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v171 ECD

<400> 463

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> 464
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v172 ECD

<400> 464

```
Val Ile His Val Thr Lys Glu Val 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>  465
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v173 ECD

<400>  465

Val Ile His Val Thr Lys Glu Val 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> 466
<211> 208
<212> PRT
<213> Artificial Sequence

<220>

<223> CD80 v174 ECD

<400> 466

```
Val Ile His Val Thr Lys Glu Val 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> 467
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v175 ECD

<400> 467

```
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>  468
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v176 ECD

<400>  468

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>  469
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v177 ECD

<400>  469

Val Ile His Val Thr Lys Glu Val 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>  470
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v178 ECD

<400>  470

Val Ile His Val Thr Lys Glu Val 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>  471
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v179 ECD

<400>  471

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 472
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v180 ECD

<400> 472

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 473
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v181 ECD

<400> 473

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 474
<211> 208
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v182 ECD

<400> 474

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>  475
<211>  208
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  CD80 v183 ECD

<400>  475

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> 476
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v153 IgV

<400> 476

```
Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1               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> 477
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> CD80 v153 IgV

<400> 477

Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu Ser Cys
1 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> 478
<211> 237
<212> PRT
<213> Artificial Sequence

<220>
<223> ICOSL v36 ECD

<400> 478

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

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