SEQUENCE LISTING

<110> UCL Business PLC

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<130> P105663PCT

<150> GB 1503500.9
<151> 2015-03-02

<160> 60

<170> PatentIn version 3.5

<210> 1
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<212> PRT
<213> Artificial Sequence

<220>
<223> Mitogenic T-cell activating transmembrane protein (OKT3-CD8STK-TM-A)

<400> 1

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Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1               5                  10                  15

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

Arg Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr
        35                  40                  45

Phe Thr Arg Tyr Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly
    50                  55                  60

Leu Glu Trp Ile Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr
65                  70                  75                  80

Asn Gln Lys Phe Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser
                85                  90                  95

Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala
            100                 105                 110

Val Tyr Tyr Cys Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr
        115                 120                 125

Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser Ser Gly Gly Gly Gly
    130                 135                 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Val Leu Thr
145                 150                 155                 160

Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met
                165                 170                 175
```

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Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln
            180                 185                 190

Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu
        195                 200                 205

Ala Ser Gly Val Pro Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser
    210                 215                 220

Tyr Ser Leu Thr Ile Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr
225                 230                 235                 240

Tyr Cys Gln Gln Trp Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr
                245                 250                 255

Lys Leu Glu Ile Asn Arg Ser Asp Pro Thr Thr Thr Pro Ala Pro Arg
            260                 265                 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
        275                 280                 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
    290                 295                 300

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
305                 310                 315                 320

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His
                325                 330                 335

Arg Asn Arg Arg Arg Val Cys Lys Cys Pro Arg Pro Val Val
            340                 345                 350


<210>  2
<211>  358
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Mitogenic T-cell activating transmembrane protein
       (15E8-CD8STK-TM-A)

<400>  2

Met Glu Thr Asp Thr Leu Ile Leu Trp Val Leu Leu Leu Leu Val Pro
1               5                   10                  15

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

Ala Pro Ser Gln Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser
        35                  40                  45
```

```
Leu Thr Ser Tyr Gly Val His Trp Val Arg Gln Pro Pro Gly Lys Gly
    50                  55                  60

Leu Glu Trp Leu Gly Val Ile Trp Ala Gly Gly Ser Thr Asn Tyr Asn
65                  70                  75                  80

Ser Ala Leu Met Ser Arg Leu Ser Ile Ser Lys Asp Asn Ser Lys Ser
                85                  90                  95

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Met
            100                 105                 110

Tyr Tyr Cys Ala Arg Asp Lys Arg Ala Pro Gly Lys Leu Tyr Tyr Gly
        115                 120                 125

Tyr Pro Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
145                 150                 155                 160

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

Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Glu Tyr Tyr Val Thr
            180                 185                 190

Ser Leu Met Gln Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu
        195                 200                 205

Leu Ile Tyr Ala Ala Ser Asn Val Glu Ser Gly Val Pro Ala Arg Phe
    210                 215                 220

Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser Leu Asn Ile His Pro Val
225                 230                 235                 240

Glu Glu Asp Asp Ile Ala Met Tyr Phe Cys Gln Gln Thr Arg Lys Val
                245                 250                 255

Pro Ser Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Ser Asp
            260                 265                 270

Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile
        275                 280                 285

Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala
    290                 295                 300

Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr
305                 310                 315                 320
```

```
Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu
                325                 330                 335


Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val Cys Lys
            340                 345                 350


Cys Pro Arg Pro Val Val
        355


<210>  3
<211>  351
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Mitogenic T-cell activating transmembrane protein
       (TGN1412-CD8STK-TM-A)

<400>  3

Met Glu Thr Asp Thr Leu Ile Leu Trp Val Leu Leu Leu Leu Val Pro
1               5                   10                  15


Gly Ser Thr Gly Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
            20                  25                  30


Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
        35                  40                  45


Phe Thr Ser Tyr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly
    50                  55                  60


Leu Glu Trp Ile Gly Cys Ile Tyr Pro Gly Asn Val Asn Thr Asn Tyr
65                  70                  75                  80


Asn Glu Lys Phe Lys Asp Arg Ala Thr Leu Thr Val Asp Thr Ser Ile
                85                  90                  95


Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala
            100                 105                 110


Val Tyr Phe Cys Thr Arg Ser His Tyr Gly Leu Asp Trp Asn Phe Asp
        115                 120                 125


Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly
    130                 135                 140


Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr
145                 150                 155                 160


Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
                165                 170                 175
```

```
Thr Cys His Ala Ser Gln Asn Ile Tyr Val Trp Leu Asn Trp Tyr Gln
            180                 185                 190

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Asn
        195                 200                 205

Leu His Thr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
    210                 215                 220

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

Tyr Tyr Cys Gln Gln Gly Gln Thr Tyr Pro Tyr Thr Phe Gly Gly Gly
                245                 250                 255

Thr Lys Val Glu Ile Lys Arg Ser Asp Pro Thr Thr Thr Pro Ala Pro
            260                 265                 270

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
        275                 280                 285

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
    290                 295                 300

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
305                 310                 315                 320

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn
                325                 330                 335

His Arg Asn Arg Arg Arg Val Cys Lys Cys Pro Arg Pro Val Val
            340                 345                 350


<210>  4
<211>  7
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  OKT3 CDRH1

<400>  4

Gly Tyr Thr Phe Thr Arg Tyr
1               5


<210>  5
<211>  6
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  OKT3 CDRH2

<400>  5
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Asn Pro Ser Arg Gly Tyr
1 5

<210> 6
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> OKT3 CDRH3

<400> 6

Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr
1 5 10

<210> 7
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> OKT3 CDRL1

<400> 7

Ser Ala Ser Ser Ser Val Ser Tyr Met Asn
1 5 10

<210> 8
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> OKT3 CDRL2

<400> 8

Asp Thr Ser Lys Leu Ala Ser
1 5

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

<220>
<223> OKT3 CDRL3

<400> 9

Gln Gln Trp Ser Ser Asn Pro Phe Thr
1 5

<210> 10
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 15E8 CDRH1

<400> 10

Gly Phe Ser Leu Thr Ser Tyr
1 5

<210> 11
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 15E8 CDRH2

<400> 11

Trp Ala Gly Gly Ser
1 5

<210> 12
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> 15E8 CDRH3

<400> 12

Asp Lys Arg Ala Pro Gly Lys Leu Tyr Tyr Gly Tyr Pro Asp Tyr
1 5 10 15

<210> 13
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> 15E8 CDRL1

<400> 13

Arg Ala Ser Glu Ser Val Glu Tyr Tyr Val Thr Ser Leu Met Gln
1 5 10 15

<210> 14
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 15E8 CDRL2

<400> 14

Ala Ala Ser Asn Val Glu Ser
1 5

<210> 15
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<223> 15E8 CDRL3

<400> 15

Gln Gln Thr Arg Lys Val Pro Ser Thr
1 5

<210> 16
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> TGN1412 CDRH1

<400> 16

Gly Tyr Thr Phe Ser Tyr
1 5

<210> 17
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> TGN1412 CDRH2

<400> 17

Tyr Pro Gly Asn Val Asn
1 5

<210> 18
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> TGN1412 CDRH3

<400> 18

Ser His Tyr Gly Leu Asp Trp Asn Phe Asp Val
1 5 10

<210> 19
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> TGN1412 CDRL1

<400> 19

His Ala Ser Gln Asn Ile Tyr Val Leu Asn
1 5 10

<210> 20
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> TGN1412 CDRL2

<400> 20

Lys Ala Ser Asn Leu His Thr
1 5

<210> 21
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> TGN1412 CDRL3

<400> 21

Gln Gln Gly Gln Thr Tyr Pro Tyr Thr
1 5

<210> 22
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> OX40L sequence

<400> 22

Met Glu Arg Val Gln Pro Leu Glu Glu Asn Val Gly Asn Ala Ala Arg
1 5 10 15

Pro Arg Phe Glu Arg Asn Lys Leu Leu Leu Val Ala Ser Val Ile Gln
20 25 30

Gly Leu Gly Leu Leu Leu Cys Phe Thr Tyr Ile Cys Leu His Phe Ser
35 40 45

Ala Leu Gln Val Ser His Arg Tyr Pro Arg Ile Gln Ser Ile Lys Val
50 55 60

Gln Phe Thr Glu Tyr Lys Lys Glu Lys Gly Phe Ile Leu Thr Ser Gln
65 70 75 80

Lys Glu Asp Glu Ile Met Lys Val Gln Asn Tyr Leu Ile Ser Leu Lys
85 90 95

Gly Tyr Phe Ser Gln Glu Val Asn Ile Ser Leu His Tyr Gln Lys Asp
100 105 110

Glu Glu Pro Leu Phe Gln Leu Lys Lys Val Arg Ser Val Asn Ser Leu
115 120 125

Met Val Ala Ser Leu Thr Tyr Lys Asp Lys Val Tyr Leu Asn Val Thr
130 135 140

```
Thr Asp Asn Thr Ser Leu Asp Asp Phe His Val Asn Gly Gly Glu Leu
145                 150                 155                 160

Ile Leu Ile His Gln Asn Pro Gly Glu Phe Cys Val Leu
                165                 170
```

<210> 23
<211> 254
<212> PRT
<213> Artificial Sequence

<220>
<223> 41BBL sequence

<400> 23

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Met Glu Tyr Ala Ser Asp Ala Ser Leu Asp Pro Glu Ala Pro Trp Pro
1               5                   10                  15

Pro Ala Pro Arg Ala Arg Ala Cys Arg Val Leu Pro Trp Ala Leu Val
            20                  25                  30

Ala Gly Leu Leu Leu Leu Leu Leu Leu Ala Ala Ala Cys Ala Val Phe
        35                  40                  45

Leu Ala Cys Pro Trp Ala Val Ser Gly Ala Arg Ala Ser Pro Gly Ser
    50                  55                  60

Ala Ala Ser Pro Arg Leu Arg Glu Gly Pro Glu Leu Ser Pro Asp Asp
65                  70                  75                  80

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

Ala Gln Asn Val Leu Leu Ile Asp Gly Pro Leu Ser Trp Tyr Ser Asp
            100                 105                 110

Pro Gly Leu Ala Gly Val Ser Leu Thr Gly Gly Leu Ser Tyr Lys Glu
        115                 120                 125

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

Phe Gln Leu Glu Leu Arg Arg Val Val Ala Gly Glu Gly Ser Gly Ser
145                 150                 155                 160

Val Ser Leu Ala Leu His Leu Gln Pro Leu Arg Ser Ala Ala Gly Ala
                165                 170                 175

Ala Ala Leu Ala Leu Thr Val Asp Leu Pro Pro Ala Ser Ser Glu Ala
            180                 185                 190
```

Arg Asn Ser Ala Phe Gly Phe Gln Gly Arg Leu Leu His Leu Ser Ala
195 200 205

Gly Gln Arg Leu Gly Val His Leu His Thr Glu Ala Arg Ala Arg His
210 215 220

Ala Trp Gln Leu Thr Gln Gly Ala Thr Val Leu Gly Leu Phe Arg Val
225 230 235 240

Thr Pro Glu Ile Pro Ala Gly Leu Pro Ser Pro Arg Ser Glu
245 250

<210> 24
<211> 234
<212> PRT
<213> Artificial Sequence

<220>
<223> spacer sequence, hinge-CH2CH3 of human IgG1

<400> 24

Ala Glu Pro Lys Ser Pro Asp Lys Thr His Thr Cys Pro Pro Cys Pro
1 5 10 15

Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
20 25 30

Lys Asp Thr Leu Met Ile Ala 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 Lys Asp
225 230

<210> 25
<211> 46
<212> PRT
<213> Artificial Sequence

<220>
<223> spacer sequence, human CD8 stalk

<400> 25

Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
1 5 10 15

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
20 25 30

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile
35 40 45

<210> 26
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> spacer sequence, human IgG1 hinge

<400> 26

Ala Glu Pro Lys Ser Pro Asp Lys Thr His Thr Cys Pro Pro Cys Pro
1 5 10 15

Lys Asp Pro Lys
20

<210> 27
<211> 185
<212> PRT
<213> Artificial Sequence

<220>
<223> spacer sequence, CD2 ectodomain

<400> 27

```
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>  28
<211>  259
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  spacer sequence, CD34 ectodomain

<400>  28

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

Thr Phe Ser Asn Val Ser Thr Asn Val Ser Tyr Gln Glu Thr Thr Thr
            20                  25                  30

Pro Ser Thr Leu Gly Ser Thr Ser Leu His Pro Val Ser Gln His Gly
        35                  40                  45
```

```
Asn Glu Ala Thr Thr Asn Ile Thr Glu Thr Thr Val Lys Phe Thr Ser
    50                  55                  60

Thr Ser Val Ile Thr Ser Val Tyr Gly Asn Thr Asn Ser Ser Val Gln
65                  70                  75                  80

Ser Gln Thr Ser Val Ile Ser Thr Val Phe Thr Thr Pro Ala Asn Val
                85                  90                  95

Ser Thr Pro Glu Thr Thr Leu Lys Pro Ser Leu Ser Pro Gly Asn Val
            100                 105                 110

Ser Asp Leu Ser Thr Thr Ser Thr Ser Leu Ala Thr Ser Pro Thr Lys
        115                 120                 125

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

Lys Cys Ser Gly Ile Arg Glu Val Lys Leu Thr Gln Gly Ile Cys Leu
145                 150                 155                 160

Glu Gln Asn Lys Thr Ser Ser Cys Ala Glu Phe Lys Lys Asp Arg Gly
                165                 170                 175

Glu Gly Leu Ala Arg Val Leu Cys Gly Glu Glu Gln Ala Asp Ala Asp
            180                 185                 190

Ala Gly Ala Gln Val Cys Ser Leu Leu Leu Ala Gln Ser Glu Val Arg
        195                 200                 205

Pro Gln Cys Leu Leu Leu Val Leu Ala Asn Arg Thr Glu Ile Ser Ser
    210                 215                 220

Lys Leu Gln Leu Met Lys Lys His Gln Ser Asp Leu Lys Lys Leu Gly
225                 230                 235                 240

Ile Leu Asp Phe Thr Glu Gln Asp Val Ala Ser His Gln Ser Tyr Ser
                245                 250                 255

Gln Lys Thr
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<210> 29
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> IL2 sequence

<400> 29

Met Tyr Arg Met Gln Leu Leu Ser Cys Ile Ala Leu Ser Leu Ala Leu
1 5 10 15

Val Thr Asn Ser Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu
20 25 30

Gln Leu Glu His Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile
35 40 45

Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe
50 55 60

Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu
65 70 75 80

Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys
85 90 95

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

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

Asp Glu Thr Ala Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe
130 135 140

Cys Gln Ser Ile Ile Ser Thr Leu Thr
145 150

<210> 30
<211> 177
<212> PRT
<213> Artificial Sequence

<220>
<223> IL7 sequence

<400> 30

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

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

Asp Gly Lys Gln Tyr Glu Ser Val Leu Met Val Ser Ile Asp Gln Leu
35 40 45

Leu Asp Ser Met Lys Glu Ile Gly Ser Asn Cys Leu Asn Asn Glu Phe
50 55 60

Asn Phe Phe Lys Arg His Ile Cys Asp Ala Asn Lys Glu Gly Met Phe
65 70 75 80

Leu Phe Arg Ala Ala Arg Lys Leu Arg Gln Phe Leu Lys Met Asn Ser
85 90 95

Thr Gly Asp Phe Asp Leu His Leu Leu Lys Val Ser Glu Gly Thr Thr
100 105 110

Ile Leu Leu Asn Cys Thr Gly Gln Val Lys Gly Arg Lys Pro Ala Ala
115 120 125

Leu Gly Glu Ala Gln Pro Thr Lys Ser Leu Glu Glu Asn Lys Ser Leu
130 135 140

Lys Glu Gln Lys Lys Leu Asn Asp Leu Cys Phe Leu Lys Arg Leu Leu
145 150 155 160

Gln Glu Ile Lys Thr Cys Trp Asn Lys Ile Leu Met Gly Thr Lys Glu
165 170 175

His

<210> 31
<211> 162
<212> PRT
<213> Artificial Sequence

<220>
<223> IL15 sequence

<400> 31

Met Arg Ile Ser Lys Pro His Leu Arg Ser Ile Ser Ile Gln Cys Tyr
1 5 10 15

Leu Cys Leu Leu Leu Asn Ser His Phe Leu Thr Glu Ala Gly Ile His
20 25 30

Val Phe Ile Leu Gly Cys Phe Ser Ala Gly Leu Pro Lys Thr Glu Ala
35 40 45

Asn Trp Val Asn Val Ile Ser Asp Leu Lys Lys Ile Glu Asp Leu Ile
50 55 60

Gln Ser Met His Ile Asp Ala Thr Leu Tyr Thr Glu Ser Asp Val His
65 70 75 80

Pro Ser Cys Lys Val Thr Ala Met Lys Cys Phe Leu Leu Glu Leu Gln
85 90 95

Val Ile Ser Leu Glu Ser Gly Asp Ala Ser Ile His Asp Thr Val Glu
100 105 110

Asn Leu Ile Ile Leu Ala Asn Asn Ser Leu Ser Ser Asn Gly Asn Val
115 120 125

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

Lys Glu Phe Leu Gln Ser Phe Val His Ile Val Gln Met Phe Ile Asn
145 150 155 160

Thr Ser

<210> 32
<211> 271
<212> PRT
<213> Artificial Sequence

<220>
<223> cytokine-based T-cell activating transmembrane protein sequence

<400> 32

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

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

Asp Gly Lys Gln Tyr Glu Ser Val Leu Met Val Ser Ile Asp Gln Leu
35 40 45

Leu Asp Ser Met Lys Glu Ile Gly Ser Asn Cys Leu Asn Asn Glu Phe
50 55 60

Asn Phe Phe Lys Arg His Ile Cys Asp Ala Asn Lys Glu Gly Met Phe
65 70 75 80

Leu Phe Arg Ala Ala Arg Lys Leu Arg Gln Phe Leu Lys Met Asn Ser
85 90 95

Thr Gly Asp Phe Asp Leu His Leu Leu Lys Val Ser Glu Gly Thr Thr
100 105 110

Ile Leu Leu Asn Cys Thr Gly Gln Val Lys Gly Arg Lys Pro Ala Ala
115 120 125

Leu Gly Glu Ala Gln Pro Thr Lys Ser Leu Glu Glu Asn Lys Ser Leu
130 135 140

Lys Glu Gln Lys Lys Leu Asn Asp Leu Cys Phe Leu Lys Arg Leu Leu
145 150 155 160

Gln Glu Ile Lys Thr Cys Trp Asn Lys Ile Leu Met Gly Thr Lys Glu
165 170 175

```
His Ser Gly Gly Gly Ser Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro
            180                 185                 190

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

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
    210                 215                 220

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
225                 230                 235                 240

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn
                245                 250                 255

His Arg Asn Arg Arg Arg Val Cys Lys Cys Pro Arg Pro Val Val
            260                 265                 270
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<210> 33
<211> 256
<212> PRT
<213> Artificial Sequence

<220>
<223> cytokine-based T-cell activating transmembrane protein sequence

<400> 33

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

Gly Trp Thr Ala Leu Cys Leu Leu Ser Leu Leu Pro Ser Gly Phe Met
            20                  25                  30

Ala Gly Ile His Val Phe Ile Leu Gly Cys Phe Ser Ala Gly Leu Pro
        35                  40                  45

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

Glu Asp Leu Ile Gln Ser Met His Ile Asp Ala Thr Leu Tyr Thr Glu
65                  70                  75                  80

Ser Asp Val His Pro Ser Cys Lys Val Thr Ala Met Lys Cys Phe Leu
                85                  90                  95

Leu Glu Leu Gln Val Ile Ser Leu Glu Ser Gly Asp Ala Ser Ile His
            100                 105                 110

Asp Thr Val Glu Asn Leu Ile Ile Leu Ala Asn Asn Ser Leu Ser Ser
        115                 120                 125
```

Asn Gly Asn Val Thr Glu Ser Gly Cys Lys Glu Cys Glu Glu Leu Glu
130 135 140

Glu Lys Asn Ile Lys Glu Phe Leu Gln Ser Phe Val His Ile Val Gln
145 150 155 160

Met Phe Ile Asn Thr Ser Ser Pro Ala Lys Pro Thr Thr Thr Pro Ala
165 170 175

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
180 185 190

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
195 200 205

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
210 215 220

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
225 230 235 240

Asn His Arg Asn Arg Arg Arg Val Cys Lys Cys Pro Arg Pro Val Val
245 250 255

<210> 34
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> self-cleaving site

<400> 34

Arg Ala Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu
1 5 10 15

Asn Pro Gly Pro
20

<210> 35
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> self-cleaving site

<400> 35

Gln Cys Thr Asn Tyr Ala Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
1 5 10 15

Asn Pro Gly Pro
20

<210> 36
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> biotin mimic, streptagII

<400> 36

Trp Ser His Pro Gln Phe Glu Lys
1 5

<210> 37
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> biotin mimic, flankedccstreptag

<400> 37

Ala Glu Cys His Pro Gln Gly Pro Pro Cys Ile Glu Gly Arg Lys
1 5 10 15

<210> 38
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> biotin mimic, ccstreptag

<400> 38

Cys His Pro Gln Gly Pro Pro Cys
1 5

<210> 39
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> biotin mimic, Long nanotag

<400> 39

Asp Val Glu Ala Trp Leu Asp Glu Arg Val Pro Leu Val Glu Thr
1 5 10 15

<210> 40
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> biotin mimic, Short nanotag

<400> 40

Asp Val Glu Ala Trp Leu Gly Ala Arg
1 5

<210> 41
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> biotin mimic, Streptag

<400> 41

Trp Arg His Pro Gln Phe Gly Gly
1 5

<210> 42
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> biotin mimic, SBP-tag

<400> 42

Met Asp Glu Lys Thr Thr Gly Trp Arg Gly Gly His Val Val Glu Gly
1 5 10 15

Leu Ala Gly Glu Leu Glu Gln Leu Arg Ala Arg Leu Glu His His Pro
20 25 30

Gln Gly Gln Arg Glu Pro
35

<210> 43
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> binding domain, StreptagII-d8-x2

<400> 43

Trp Ser His Pro Gln Phe Glu Lys Ser Gly Gly Gly Gly Ser Pro Ala
1 5 10 15

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Trp Ser His Pro
20 25 30

Gln Phe Glu Lys
35

<210> 44
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> binding domain, Flankedccstreptag-d8-x2

<400> 44

Glu Cys His Pro Gln Gly Pro Pro Cys Ile Glu Gly Arg Lys Ser Ser
1 5 10 15

Gly Gly Gly Gly Ser Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
20 25 30

Ile Ala Ser Glu Cys His Pro Gln Gly Pro Pro Cys Ile Glu Gly Arg
35 40 45

Lys Ser
50

<210> 45
<211> 251
<212> PRT
<213> Artificial Sequence

<220>
<223> glutathione S-transferase (GST) domain

<400> 45

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

Asp His Ala Asp Ala Met Ser Pro Ile Leu Gly Tyr Trp Lys Ile Lys
20 25 30

Gly Leu Val Gln Pro Thr Arg Leu Leu Leu Glu Tyr Leu Glu Glu Lys
35 40 45

Tyr Glu Glu His Leu Tyr Glu Arg Asp Glu Gly Asp Lys Trp Arg Asn
50 55 60

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

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

Ala Asp Lys His Asn Met Leu Gly Gly Cys Pro Lys Glu Arg Ala Glu
100 105 110

Ile Ser Met Leu Glu Gly Ala Val Leu Asp Ile Arg Tyr Gly Val Ser
115 120 125

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

Ser Lys Leu Pro Glu Met Leu Lys Met Phe Glu Asp Arg Leu Cys His
145 150 155 160

Lys Thr Tyr Leu Asn Gly Asp His Val Thr His Pro Asp Phe Met Leu
165 170 175

Tyr Asp Ala Leu Asp Val Val Leu Tyr Met Asp Pro Met Cys Leu Asp
180 185 190

Ala Phe Pro Lys Leu Val Cys Phe Lys Lys Arg Ile Glu Ala Ile Pro
195 200 205

Gln Ile Asp Lys Tyr Leu Lys Ser Ser Lys Tyr Ile Ala Trp Pro Leu
210 215 220

Gln Gly Trp Gln Ala Thr Phe Gly Gly Gly Asp His Pro Pro Lys Ser
225 230 235 240

Asp Leu Glu Val Leu Phe Gln Gly Pro Leu Gly
245 250

<210> 46
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Rituximab-binding epitope sequence from CD20

<400> 46

Cys Glu Pro Ala Asn Pro Ser Glu Lys Asn Ser Pro Ser Thr Gln Tyr
1 5 10 15

Cys

<210> 47
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R15-C

<400> 47

Ala Cys Pro Tyr Ala Asn Pro Ser Leu Cys
1 5 10

<210> 48
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R3-C

<400> 48

Ala Cys Pro Tyr Ser Asn Pro Ser Leu Cys
1 5 10

<210> 49
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R7-C

<400> 49

Ala Cys Pro Phe Ala Asn Pro Ser Thr Cys
1 5 10

<210> 50
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R8-, R12-, R18-C

<400> 50

Ala Cys Asn Phe Ser Asn Pro Ser Leu Cys
1 5 10

<210> 51
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R14-C

<400> 51

Ala Cys Pro Phe Ser Asn Pro Ser Met Cys
1 5 10

<210> 52
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R16-C

<400> 52

Ala Cys Ser Trp Ala Asn Pro Ser Gln Cys
1 5 10

<210> 53
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R17-C

<400> 53

Ala Cys Met Phe Ser Asn Pro Ser Leu Cys
1 5 10

<210> 54
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R19-C

<400> 54

Ala Cys Pro Phe Ala Asn Pro Ser Met Cys
1 5 10

<210> 55
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R2-C

<400> 55

Ala Cys Trp Ala Ser Asn Pro Ser Leu Cys
1 5 10

<210> 56
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R10-C

<400> 56

Ala Cys Glu His Ser Asn Pro Ser Leu Cys
1 5 10

<210> 57
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> cysteine-constrained 7-mer cyclic peptide, R13-C

<400> 57

Ala Cys Trp Ala Ala Asn Pro Ser Met Cys
1 5 10

<210> 58
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> mimetope of Rituximab

<400> 58

Gln Asp Lys Leu Thr Gln Trp Pro Lys Trp Leu Glu
1 5 10

<210> 59
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> QBEnd10-binding epitope from within the CD34 antigen

<400> 59

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

<210> 60
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> binding domain RQR8

<400> 60

Cys Pro Tyr Ser Asn Pro Ser Leu Cys Ser Gly Gly Gly Gly Ser Glu
1 5 10 15

Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser Pro
20 25 30

Ala Lys Pro Thr Thr Thr Ala Cys Pro Tyr Ser Asn Pro Ser Leu Cys
35 40 45

Ser Gly Gly Gly Gly Ser Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
50 55 60

Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
65 70 75 80

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
85 90 95

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
100 105 110

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
115 120 125

Cys Lys Cys Pro Arg Pro Val Val
130 135