

SEQUENCE LISTING

<110> Direvo Biotech AG
 5 <120> Antibodies to TNFalpha
 <130> BHC 08 1 060
 <160> 516
 10 <170> PatentIn version 3.5
 <210> 1
 <211> 224
 15 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> D2E7 heavy chain
 20 <400> 1
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 25 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 45 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 65 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val

180 185 190
 5 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 10 <210> 2
 <211> 214
 <212> PRT
 15 <213> Artificial Sequence
 <220>
 <223> D2E7 light chain
 20 <400> 2
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 25 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 30 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 40 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 45 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 50 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 55 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

5

Phe Asn Arg Gly Glu Cys
 210

10

<210> 3
 <211> 672
 <212> DNA
 <213> Artificial Sequence

15

<220>
 <223> D2E7 heavy chain

20

<400> 3 60
 gaagttcagc tgggtgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg
 agctgtgctg cgagcggctt tacctttgat gattatgcga tgcattgggt gcgtcaggcc 120
 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg ttttaccatt agcctgtata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgcgc 300
 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360
 agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc 420
 ggtggcaccg cagcgtctggg ttgcctggtg aaagattatt tcccggaaacc ggtgaccgtg 480
 agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc 540
 agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccagc 600
 acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa 660
 ccgaaaagct gc 672

45

<210> 4
 <211> 642
 <212> DNA
 <213> Artificial Sequence

50

<220>
 <223> D2E7 light chain

55

<400> 4 60
 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc
 attacctgcc gtgcgagcca gggcattcgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttatgcg gcgagcaccg tgcagagcgg tgtgccgagc 180
 cgtttttagcg gcagcggtag cggcaccgat ttaccctga ccattagcag cctgcagccg 240
 gaagatgtgg cgacctatta ttgccagcgt tataaccgtg cgccgtatac ctttggtcag 300
 ggtaccaaag ttgaaattaa acgtaccgtg gcagcgcga gcgtgttcat tttccgccg 360
 agcgatgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat 420

```

ccgcgtgaag cgaaagtga gtggaaagtg gataacgcgc tgcagagcgg caacagccag      480
gaaagcgтта ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc      540
5  ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgac ccatcagggc      600
ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc                          642

```

```

10 <210> 5
   <211> 224
   <212> PRT
   <213> Artificial Sequence

```

```

15 <220>
   <223> modified heavy chain

```

```

20 <220>
   <221> VARIANT
   <222> (1)..(1)
   <223> X= E or K

```

```

25 <220>
   <221> VARIANT
   <222> (3)..(3)
   <223> X = Q or R

```

```

30 <220>
   <221> VARIANT
   <222> (5)..(5)
   <223> X = V or I

```

```

35 <220>
   <221> VARIANT
   <222> (13)..(13)
   <223> X = Q or H

```

```

40 <220>
   <221> VARIANT
   <222> (16)..(16)
   <223> X = R or H

```

```

45 <220>
   <221> VARIANT
   <222> (23)..(23)
   <223> X = A, V or T

```

```

50 <220>
   <221> VARIANT
   <222> (24)..(24)
   <223> X = A or S

```

```

55 <220>
   <221> VARIANT
   <222> (28)..(28)
   <223> X = T or S

```

```

60 <220>
   <221> VARIANT
   <222> (30)..(30)
   <223> X = D, G or R

```

```

65 <220>
   <221> VARIANT
   <222> (31)..(31)
   <223> X = D,H, Q, G, T, N or R

```


<220>
<221> VARIANT
<222> (32)..(32)
5 <223> X = Y, F, R, Q or S

<220>
<221> VARIANT
<222> (34)..(34)
10 <223> X = M or I

<220>
<221> VARIANT
<222> (39)..(39)
15 <223> X = Q or R

<220>
<221> VARIANT
<222> (40)..(40)
20 <223> X = A or V

<220>
<221> VARIANT
<222> (50)..(50)
25 <223> X = A or G

<220>
<221> VARIANT
<222> (58)..(58)
30 <223> X = I, V or T

<220>
<221> VARIANT
<222> (65)..(65)
35 <223> X = E or R

<220>
<221> VARIANT
<222> (66)..(66)
40 <223> X = G or N

<220>
<221> VARIANT
<222> (100)..(100)
45 <223> X = S or K

<220>
<221> VARIANT
<222> (103)..(103)
50 <223> X = S, Q or P

<220>
<221> VARIANT
<222> (107)..(107)
55 <223> X = S or Q

<220>
<221> VARIANT
<222> (124)..(124)
60 <223> X = T or A

<220>
<221> VARIANT
<222> (145)..(145)
65 <223> X = A or V

<220>

<221> VARIANT
 <222> (167)..(167)
 <223> X = L or P

5 <220>
 <221> VARIANT
 <222> (200)..(200)
 <223> X = Q or K

10 <220>
 <221> VARIANT
 <222> (219)..(219)
 <223> X = V or M

15 <220>
 <221> VARIANT
 <222> (220)..(220)
 <223> X = E or G

20 <400> 5
 Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
 1 5 10 15

25 Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Xaa
 20 25 30

30 Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

35 Ser Xaa Ile Thr Trp Asn Ser Gly His Xaa Asp Tyr Ala Asp Ser Val
 50 55 60

40 Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

45 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
 100 105 110

50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Xaa Lys Gly Pro Ser
 115 120 125

55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

60 Xaa Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Xaa Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

65 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

5

Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Xaa Xaa Pro Lys Ser Cys
 210 215 220

10

<210> 6
 <211> 224
 <212> PRT
 <213> Artificial Sequence

15

<220>
 <223> modified heavy chain

20

<220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X= E or K

25

<220>
 <221> VARIANT
 <222> (3)..(3)
 <223> X = Q or R

30

<220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = V or I

35

<220>
 <221> VARIANT
 <222> (13)..(13)
 <223> X = Q or H

40

<220>
 <221> VARIANT
 <222> (16)..(16)
 <223> X = R or H

45

<220>
 <221> VARIANT
 <222> (23)..(23)
 <223> X = A, V or T

50

<220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = A or S

55

<220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = T or S

60

<220>
 <221> VARIANT
 <222> (30)..(30)
 <223> X = D, G or R

65

<220>
 <221> VARIANT
 <222> (31)..(31)

<223> X = D,H, Q, G, T, N or R

<220>

<221> VARIANT

5 <222> (32)..(32)

<223> X = F, R or Q

<220>

<221> VARIANT

10 <222> (34)..(34)

<223> X = M or I

<220>

<221> VARIANT

15 <222> (39)..(39)

<223> X = Q or R

<220>

<221> VARIANT

20 <222> (40)..(40)

<223> X = A or V

<220>

<221> VARIANT

25 <222> (50)..(50)

<223> X = A or G

<220>

<221> VARIANT

30 <222> (58)..(58)

<223> X = I, V or T

<220>

<221> VARIANT

35 <222> (65)..(65)

<223> X = E or R

<220>

<221> VARIANT

40 <222> (66)..(66)

<223> X = G or N

<220>

<221> VARIANT

45 <222> (100)..(100)

<223> X = S or K

<220>

<221> VARIANT

50 <222> (103)..(103)

<223> X = S, Q or P

<220>

<221> VARIANT

55 <222> (107)..(107)

<223> X = S or Q

<220>

<221> VARIANT

60 <222> (124)..(124)

<223> X = T or A

<220>

<221> VARIANT

65 <222> (145)..(145)

<223> X = A or V

<220>
 <221> VARIANT
 <222> (167)..(167)
 <223> X = L or P

5

<220>
 <221> VARIANT
 <222> (200)..(200)
 <223> X = Q or K

10

<220>
 <221> VARIANT
 <222> (219)..(219)
 <223> X = V or M

15

<220>
 <221> VARIANT
 <222> (220)..(220)
 <223> X = E or G

20

<400> 6

Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
 1 5 10 15

25

Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Xaa
 20 25 30

30

Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

35

Ser Xaa Ile Thr Trp Asn Ser Gly His Xaa Asp Tyr Ala Asp Ser Val
 50 55 60

40

Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

45

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50

Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
 100 105 110

55

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Xaa Lys Gly Pro Ser
 115 120 125

60

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Xaa Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

65

Ser Trp Asn Ser Gly Ala Xaa Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val

[illegible]

<222> (31)..(31)
<223> X = D,H, Q, G, T, N or R

5 <220>
<221> VARIANT
<222> (34)..(34)
<223> X = M or I

10 <220>
<221> VARIANT
<222> (39)..(39)
<223> X = Q or R

15 <220>
<221> VARIANT
<222> (40)..(40)
<223> X = A or V

20 <220>
<221> VARIANT
<222> (50)..(50)
<223> X = A or G

25 <220>
<221> VARIANT
<222> (58)..(58)
<223> X = I, V or T

30 <220>
<221> VARIANT
<222> (65)..(65)
<223> X = E or R

35 <220>
<221> VARIANT
<222> (66)..(66)
<223> X = G or N

40 <220>
<221> VARIANT
<222> (100)..(100)
<223> X = S or K

45 <220>
<221> VARIANT
<222> (103)..(103)
<223> X = S, Q or P

50 <220>
<221> VARIANT
<222> (107)..(107)
<223> X = S or Q

55 <220>
<221> VARIANT
<222> (124)..(124)
<223> X = T or A

60 <220>
<221> VARIANT
<222> (145)..(145)
<223> X = A or V

65 <220>
<221> VARIANT
<222> (167)..(167)
<223> X = L or P

<220>
 <221> VARIANT
 <222> (200)..(200)
 5 <223> X = Q or K

<220>
 <221> VARIANT
 <222> (219)..(219)
 10 <223> X = V or M

<220>
 <221> VARIANT
 <222> (220)..(220)
 15 <223> X = E or G

<400> 7

20 Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
 1 5 10 15

Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Phe
 20 25 30

25 Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

30 Ser Xaa Ile Thr Trp Asn Ser Gly His Xaa Asp Tyr Ala Asp Ser Val
 50 55 60

35 Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

40 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

45 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Xaa Lys Gly Pro Ser
 115 120 125

50 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

55 Xaa Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

60 Ser Trp Asn Ser Gly Ala Xaa Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

65 Pro Ser Ser Ser Leu Gly Thr Xaa Thr Tyr Ile Cys Asn Val Asn His

195 200 205
 5 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Xaa Xaa Pro Lys Ser Cys
 210 215 220

 10 <210> 8
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 15 <220>
 <223> modified heavy chain

 20 <220>
 <221> VARIANT
 <222> (13)..(13)
 <223> X = Q or H

 25 <220>
 <221> VARIANT
 <222> (30)..(30)
 <223> X = D or G

 30 <220>
 <221> VARIANT
 <222> (100)..(100)
 <223> X = S or K

 35 <220>
 <221> VARIANT
 <222> (103)..(103)
 <223> X = S or P

 <400> 8
 40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Xaa Gln Phe
 20 25 30
 45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 65 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser

115 120 125
 5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 10 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 15 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 25 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 30 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 35 <210> 9
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> modified heavy chain
 40 <220>
 <221> VARIANT
 <222> (13)..(13)
 <223> X = Q or H
 45 <220>
 <221> VARIANT
 <222> (100)..(100)
 <223> X = S or K
 50 <220>
 <221> VARIANT
 <222> (103)..(103)
 <223> X = S or P
 <400> 9
 55 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Arg
 1 5 10 15
 60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe
 20 25 30
 65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 70 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

5
10
15
20
25
30
35
40
45
50
55
60
65

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110
Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125
Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140
Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160
Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175
Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190
Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
195 200 205
Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
210 215 220
<210> 10
<211> 224
<212> PRT
<213> Artificial Sequence
<220>
<223> modified heavy chain
<220>
<221> VARIANT
<222> (1)..(1)
<223> X= E or K
<220>
<221> VARIANT
<222> (3)..(3)
<223> X = Q or R
<220>
<221> VARIANT
<222> (5)..(5)
<223> X = V or I
<220>

<221> VARIANT
<222> (13)..(13)
<223> X = Q or H

5 <220>
<221> VARIANT
<222> (16)..(16)
<223> X = R or H

10 <220>
<221> VARIANT
<222> (23)..(23)
<223> X = A, V or T

15 <220>
<221> VARIANT
<222> (24)..(24)
<223> X = A or S

20 <220>
<221> VARIANT
<222> (28)..(28)
<223> X = T or S

25 <220>
<221> VARIANT
<222> (30)..(30)
<223> X = D, G or R

30 <220>
<221> VARIANT
<222> (31)..(31)
<223> X = D,H, Q, G, T, N or R

35 <220>
<221> VARIANT
<222> (32)..(32)
<223> X = Y, F, R, Q or S

40 <220>
<221> VARIANT
<222> (34)..(34)
<223> X = M or I

45 <220>
<221> VARIANT
<222> (39)..(39)
<223> X = Q or R

50 <220>
<221> VARIANT
<222> (40)..(40)
<223> X = A or V

55 <220>
<221> VARIANT
<222> (50)..(50)
<223> X = A or G

60 <220>
<221> VARIANT
<222> (65)..(65)
<223> X = E or R

65 <220>
<221> VARIANT
<222> (66)..(66)

<223> X = G or N
 <220>
 <221> VARIANT
 5 <222> (100)..(100)
 <223> X = S or K
 <220>
 <221> VARIANT
 10 <222> (103)..(103)
 <223> X = S, Q or P
 <220>
 <221> VARIANT
 15 <222> (107)..(107)
 <223> X = S or Q
 <220>
 <221> VARIANT
 20 <222> (124)..(124)
 <223> X = T or A
 <220>
 <221> VARIANT
 25 <222> (145)..(145)
 <223> X = A or V
 <220>
 <221> VARIANT
 30 <222> (167)..(167)
 <223> X = L or P
 <220>
 <221> VARIANT
 35 <222> (200)..(200)
 <223> X = Q or K
 <220>
 <221> VARIANT
 40 <222> (219)..(219)
 <223> X = V or M
 <220>
 <221> VARIANT
 45 <222> (220)..(220)
 <223> X = E or G
 <400> 10
 50 Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Xaa
 55 20 25 30
 Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
 60 35 40 45
 Ser Xaa Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 65 Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

5
 <220>
 <221> VARIANT
 <222> (16)..(16)
 <223> X = R or H

10
 <220>
 <221> VARIANT
 <222> (23)..(23)
 <223> X = A, V or T

15
 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = A or S

20
 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = T or S

25
 <220>
 <221> VARIANT
 <222> (31)..(31)
 <223> X = D,H, Q, G, T, N or R

30
 <220>
 <221> VARIANT
 <222> (32)..(32)
 <223> X = Y, F, R, Q or S

35
 <220>
 <221> VARIANT
 <222> (34)..(34)
 <223> X = M or I

40
 <220>
 <221> VARIANT
 <222> (39)..(39)
 <223> X = Q or R

45
 <220>
 <221> VARIANT
 <222> (40)..(40)
 <223> X = A or V

50
 <220>
 <221> VARIANT
 <222> (50)..(50)
 <223> X = A or G

55
 <220>
 <221> VARIANT
 <222> (65)..(65)
 <223> X = E or R

60
 <220>
 <221> VARIANT
 <222> (66)..(66)
 <223> X = G or N

65
 <220>
 <221> VARIANT
 <222> (100)..(100)
 <223> X = S or K

 <220>
 <221> VARIANT

<222> (103)..(103)
 <223> X = S, Q or P

5 <220>
 <221> VARIANT
 <222> (107)..(107)
 <223> X = S or Q

10 <220>
 <221> VARIANT
 <222> (124)..(124)
 <223> X = T or A

15 <220>
 <221> VARIANT
 <222> (145)..(145)
 <223> X = A or V

20 <220>
 <221> VARIANT
 <222> (167)..(167)
 <223> X = L or P

25 <220>
 <221> VARIANT
 <222> (200)..(200)
 <223> X = Q or K

30 <220>
 <221> VARIANT
 <222> (219)..(219)
 <223> X = V or M

35 <220>
 <221> VARIANT
 <222> (220)..(220)
 <223> X = E or G

40 <400> 11
 Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
 1 5 10 15

45 Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Gly Xaa Xaa
 20 25 30

50 Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55 Ser Xaa Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

60 Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

65 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Xaa Lys Gly Pro Ser
 115 120 125

5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

10 Xaa Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

15 Ser Trp Asn Ser Gly Ala Xaa Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

25 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Xaa Xaa Pro Lys Ser Cys
 210 215 220

30 <210> 12
 <211> 214
 <212> PRT
 <213> Artificial Sequence

35 <220>
 <223> modified light chain

40 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

45 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

50 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M

55 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

60 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

65 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

<220>
 <221> VARIANT
 <222> (27)..(27)
 5 <223> X = Q, M, L, Y, V, W or K

<220>
 <221> VARIANT
 <222> (28)..(28)
 10 <223> X = G, R, S, D, P or L

<220>
 <221> VARIANT
 <222> (29)..(29)
 15 <223> X = I, V or L

<220>
 <221> VARIANT
 <222> (41)..(41)
 20 <223> X = G or S

<220>
 <221> VARIANT
 <222> (49)..(49)
 25 <223> X = Y, R, V, W, G or S

<220>
 <221> VARIANT
 <222> (52)..(52)
 30 <223> X = S, G, N or W

<220>
 <221> VARIANT
 <222> (53)..(53)
 35 <223> X = T, W, S, Y, G or V

<220>
 <221> VARIANT
 <222> (54)..(54)
 40 <223> X = L, F, T or S

<220>
 <221> VARIANT
 <222> (55)..(55)
 45 <223> X = Q, K, I, E, G, V, T, R, S or L

<220>
 <221> VARIANT
 <222> (56)..(56)
 50 <223> X = S, K or R

<220>
 <221> VARIANT
 <222> (57)..(57)
 55 <223> X = G or S

<220>
 <221> VARIANT
 <222> (58)..(58)
 60 <223> X = V or M

<220>
 <221> VARIANT
 <222> (78)..(78)
 65 <223> X = L or P

<220>

- <221> VARIANT
<222> (80)..(80)
<223> X = P or Q
- 5 <220>
<221> VARIANT
<222> (92)..(92)
<223> X = N, D or I
- 10 <220>
<221> VARIANT
<222> (93)..(93)
<223> X = R, Q, K or M
- 15 <220>
<221> VARIANT
<222> (94)..(94)
<223> X = A, P or S
- 20 <220>
<221> VARIANT
<222> (95)..(95)
<223> X = P, F, Q, A, S, M, E or V
- 25 <220>
<221> VARIANT
<222> (104)..(104)
<223> X = V or I
- 30 <220>
<221> VARIANT
<222> (129)..(129)
<223> X = T or A
- 35 <220>
<221> VARIANT
<222> (136)..(136)
<223> X = L or P
- 40 <220>
<221> VARIANT
<222> (144)..(144)
<223> X = A or S
- 45 <220>
<221> VARIANT
<222> (161)..(161)
<223> X = E or D
- 50 <220>
<221> VARIANT
<222> (166)..(166)
<223> X = Q or R
- 55 <220>
<221> VARIANT
<222> (180)..(180)
<223> X = T or I
- 60 <220>
<221> VARIANT
<222> (196)..(196)
<223> X = V or A
- 65 <220>
<221> VARIANT
<222> (197)..(197)

<223> X = T or A

<220>

<221> VARIANT

5 <222> (212)..(212)

<223> X = G or V

<220>

<221> VARIANT

10 <222> (214)..(214)

<223> X = C or G

<400> 12

15 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
1 5 10 15

20 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
20 25 30

25 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
35 40 45

Xaa Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
50 55 60

30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
65 70 75 80

35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
85 90 95

40 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa
130 135 140

50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

55 Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

60 Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

65 Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Xaa Glu Xaa

210

- 5 <210> 13
 <211> 214
 <212> PRT
 <213> Artificial Sequence
- 10 <220>
 <223> modified light chain
- 15 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N
- 20 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S
- 25 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M
- 30 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A
- 35 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G
- 40 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T
- 45 <220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K
- 50 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L
- 55 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L
- 60 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S
- 65 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

5
 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

10
 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

15
 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

20
 <220>
 <221> VARIANT
 <222> (57)..(57)
 <223> X = G or S

25
 <220>
 <221> VARIANT
 <222> (58)..(58)
 <223> X = V or M

30
 <220>
 <221> VARIANT
 <222> (78)..(78)
 <223> X = L or P

35
 <220>
 <221> VARIANT
 <222> (80)..(80)
 <223> X = P or Q

40
 <220>
 <221> VARIANT
 <222> (92)..(92)
 <223> X = N, D or I

45
 <220>
 <221> VARIANT
 <222> (93)..(93)
 <223> X = R, Q, K or M

50
 <220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A, P or S

55
 <220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

60
 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

65
 <220>
 <221> VARIANT
 <222> (129)..(129)
 <223> X = T or A

 <220>
 <221> VARIANT

<222> (136)..(136)
 <223> X = L or P

5 <220>
 <221> VARIANT
 <222> (144)..(144)
 <223> X = A or S

10 <220>
 <221> VARIANT
 <222> (161)..(161)
 <223> X = E or D

15 <220>
 <221> VARIANT
 <222> (166)..(166)
 <223> X = Q or R

20 <220>
 <221> VARIANT
 <222> (180)..(180)
 <223> X = T or I

25 <220>
 <221> VARIANT
 <222> (196)..(196)
 <223> X = V or A

30 <220>
 <221> VARIANT
 <222> (197)..(197)
 <223> X = T or A

35 <220>
 <221> VARIANT
 <222> (212)..(212)
 <223> X = G or V

40 <220>
 <221> VARIANT
 <222> (214)..(214)
 <223> X = C or G

45 <400> 13
 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15

50 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

55 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45

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

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80

65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 5
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 10
 Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa
 130 135 140
 15
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 20
 Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 25
 Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30
 Phe Asn Arg Xaa Glu Xaa
 210
 35
 <210> 14
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 40
 <220>
 <223> modified light chain
 45
 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N
 50
 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S
 55
 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M
 60
 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A
 65
 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

5 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

10 <220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K

15 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

20 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

25 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

30 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

35 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

40 <220>
 <221> VARIANT
 <222> (54)..(54)
 <223> X = L, F, T or S

45 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

50 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

55 <220>
 <221> VARIANT
 <222> (57)..(57)
 <223> X = G or S

60 <220>
 <221> VARIANT
 <222> (58)..(58)
 <223> X = V or M

65 <220>
 <221> VARIANT
 <222> (78)..(78)
 <223> X = L or P

 <220>

<221> VARIANT
<222> (80)..(80)
<223> X = P or Q

5 <220>
<221> VARIANT
<222> (92)..(92)
<223> X = N, D or I

10 <220>
<221> VARIANT
<222> (93)..(93)
<223> X = R, Q, K or M

15 <220>
<221> VARIANT
<222> (94)..(94)
<223> X = A, P or S

20 <220>
<221> VARIANT
<222> (95)..(95)
<223> X = P, F, Q, A, S, M, E or V

25 <220>
<221> VARIANT
<222> (104)..(104)
<223> X = V or I

30 <220>
<221> VARIANT
<222> (129)..(129)
<223> X = T or A

35 <220>
<221> VARIANT
<222> (136)..(136)
<223> X = L or P

40 <220>
<221> VARIANT
<222> (144)..(144)
<223> X = A or S

45 <220>
<221> VARIANT
<222> (161)..(161)
<223> X = E or D

50 <220>
<221> VARIANT
<222> (166)..(166)
<223> X = Q or R

55 <220>
<221> VARIANT
<222> (180)..(180)
<223> X = T or I

60 <220>
<221> VARIANT
<222> (196)..(196)
<223> X = V or A

65 <220>
<221> VARIANT
<222> (197)..(197)

<223> X = T or A

<220>

<221> VARIANT

5 <222> (212)..(212)

<223> X = G or V

<220>

<221> VARIANT

10 <222> (214)..(214)

<223> X = C or G

<400> 14

15 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
1 5 10 15

20 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
20 25 30

25 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
35 40 45

Xaa Ala Ala Xaa Ser Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
50 55 60

30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
65 70 75 80

35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
85 90 95

40 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa
130 135 140

50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

55 Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

60 Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

65 Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Xaa Glu Xaa

210

5 <210> 15
 <211> 214
 <212> PRT
 <213> Artificial Sequence

10 <220>
 <223> modified light chain

15 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

20 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

25 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M

30 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

35 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

40 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

45 <220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K

50 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

55 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

60 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

65 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

5 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

 10 <220>
 <221> VARIANT
 <222> (54)..(54)
 <223> X = L, F, T or S

 15 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

 20 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

 25 <220>
 <221> VARIANT
 <222> (57)..(57)
 <223> X = G or S

 30 <220>
 <221> VARIANT
 <222> (58)..(58)
 <223> X = V or M

 35 <220>
 <221> VARIANT
 <222> (78)..(78)
 <223> X = L or P

 40 <220>
 <221> VARIANT
 <222> (80)..(80)
 <223> X = P or Q

 45 <220>
 <221> VARIANT
 <222> (92)..(92)
 <223> X = N, D or I

 50 <220>
 <221> VARIANT
 <222> (93)..(93)
 <223> X = R, Q, K or M

 55 <220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A, P or S

 60 <220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

 65 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

 <220>
 <221> VARIANT

```

<222> (129)..(129)
<223> X = T or A

5  <220>
    <221> VARIANT
    <222> (136)..(136)
    <223> X = L or P

10 <220>
    <221> VARIANT
    <222> (144)..(144)
    <223> X = A or S

15 <220>
    <221> VARIANT
    <222> (161)..(161)
    <223> X = E or D

20 <220>
    <221> VARIANT
    <222> (166)..(166)
    <223> X = Q or R

25 <220>
    <221> VARIANT
    <222> (180)..(180)
    <223> X = T or I

30 <220>
    <221> VARIANT
    <222> (196)..(196)
    <223> X = V or A

35 <220>
    <221> VARIANT
    <222> (197)..(197)
    <223> X = T or A

40 <220>
    <221> VARIANT
    <222> (212)..(212)
    <223> X = G or V

45 <220>
    <221> VARIANT
    <222> (214)..(214)
    <223> X = C or G

50 <400> 15
    Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
    1             5             10             15

55 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
    20             25             30

60 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
    35             40             45

    Xaa Ala Ala Xaa Trp Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
    50             55             60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa

```

BHC 08 1 060

-35 -

	65	70	75	80
5	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr	85	90	95
10	Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala	100	105	110
15	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120	125
20	Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa	130	135	140
25	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150	155
30	Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170	175
35	Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185	190
40	Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	200	205
45	Phe Asn Arg Xaa Glu Xaa	210		
50	<210> 16 <211> 214 <212> PRT <213> Artificial Sequence			
55	<220> <221> VARIANT <222> (1)..(1) <223> X = D or N			
60	<220> <221> VARIANT <222> (5)..(5) <223> X = T or S			
65	<220> <221> VARIANT <222> (15)..(15) <223> X = V or M			
70	<220> <221> VARIANT <222> (24)..(24) <223> X = R, H, T, L or A			

5 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

10 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

15 <220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K

20 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

25 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

30 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

35 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

40 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

45 <220>
 <221> VARIANT
 <222> (53)..(53)
 <223> X = W, S, Y, G or V

50 <220>
 <221> VARIANT
 <222> (54)..(54)
 <223> X = L, F, T or S

55 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

60 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

65 <220>
 <221> VARIANT
 <222> (57)..(57)
 <223> X = G or S

<220>

	<221>	VARIANT
	<222>	(58)..(58)
	<223>	X = V or M
5	<220>	
	<221>	VARIANT
	<222>	(78)..(78)
	<223>	X = L or P
10	<220>	
	<221>	VARIANT
	<222>	(80)..(80)
	<223>	X = P or Q
15	<220>	
	<221>	VARIANT
	<222>	(92)..(92)
	<223>	X = N, D or I
20	<220>	
	<221>	VARIANT
	<222>	(93)..(93)
	<223>	X = R, Q, K or M
25	<220>	
	<221>	VARIANT
	<222>	(94)..(94)
	<223>	X = A, P or S
30	<220>	
	<221>	VARIANT
	<222>	(95)..(95)
	<223>	X = P, F, Q, A, S, M, E or V
35	<220>	
	<221>	VARIANT
	<222>	(104)..(104)
	<223>	X = V or I
40	<220>	
	<221>	VARIANT
	<222>	(129)..(129)
	<223>	X = T or A
45	<220>	
	<221>	VARIANT
	<222>	(136)..(136)
	<223>	X = L or P
50	<220>	
	<221>	VARIANT
	<222>	(144)..(144)
	<223>	X = A or S
55	<220>	
	<221>	VARIANT
	<222>	(161)..(161)
	<223>	X = E or D
60	<220>	
	<221>	VARIANT
	<222>	(166)..(166)
	<223>	X = Q or R
65	<220>	
	<221>	VARIANT
	<222>	(180)..(180)

<223> X = T or I
 <220>
 <221> VARIANT
 5 <222> (196)..(196)
 <223> X = V or A
 <220>
 <221> VARIANT
 10 <222> (197)..(197)
 <223> X = T or A
 <220>
 <221> VARIANT
 15 <222> (212)..(212)
 <223> X = G or V
 <220>
 <221> VARIANT
 20 <222> (214)..(214)
 <223> X = C or G
 <400> 16
 25 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Xaa Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60
 40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80
 45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95
 50 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa
 130 135 140
 60 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 65 Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

	Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
	180 185 190
5	Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
	195 200 205
10	Phe Asn Arg Xaa Glu Xaa
	210
15	<210> 17
	<211> 214
	<212> PRT
	<213> Artificial Sequence
20	<220>
	<223> modified light chain
25	<220>
	<221> VARIANT
	<222> (1)..(1)
	<223> X = D or N
30	<220>
	<221> VARIANT
	<222> (5)..(5)
	<223> X = T or S
35	<220>
	<221> VARIANT
	<222> (15)..(15)
	<223> X = V or M
40	<220>
	<221> VARIANT
	<222> (24)..(24)
	<223> X = R, H, T, L or A
45	<220>
	<221> VARIANT
	<222> (25)..(25)
	<223> X = A, T, S or G
50	<220>
	<221> VARIANT
	<222> (26)..(26)
	<223> X = S or T
55	<220>
	<221> VARIANT
	<222> (27)..(27)
	<223> X = Q, M, L, Y, V, W or K
60	<220>
	<221> VARIANT
	<222> (28)..(28)
	<223> X = G, R, S, D, P or L
65	<220>
	<221> VARIANT
	<222> (29)..(29)
	<223> X = I, V or L

5
10
15
20
25
30
35
40
45
50
55
60
65

<220>
<221> VARIANT
<222> (41)..(41)
<223> X = G or S

<220>
<221> VARIANT
<222> (49)..(49)
<223> X = Y, R, V, W, G or S

<220>
<221> VARIANT
<222> (52)..(52)
<223> X = S, G, N or W

<220>
<221> VARIANT
<222> (53)..(53)
<223> X = T, W, S, Y, G or V

<220>
<221> VARIANT
<222> (55)..(55)
<223> X = Q, K, I, E, G, V, T, R, S or L

<220>
<221> VARIANT
<222> (56)..(56)
<223> X = S, K or R

<220>
<221> VARIANT
<222> (57)..(57)
<223> X = G or S

<220>
<221> VARIANT
<222> (58)..(58)
<223> X = V or M

<220>
<221> VARIANT
<222> (78)..(78)
<223> X = L or P

<220>
<221> VARIANT
<222> (80)..(80)
<223> X = P or Q

<220>
<221> VARIANT
<222> (92)..(92)
<223> X = N, D or I

<220>
<221> VARIANT
<222> (93)..(93)
<223> X = R, Q, K or M

<220>
<221> VARIANT
<222> (94)..(94)
<223> X = A, P or S

<220>
<221> VARIANT

<222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

5 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

10 <220>
 <221> VARIANT
 <222> (129)..(129)
 <223> X = T or A

15 <220>
 <221> VARIANT
 <222> (136)..(136)
 <223> X = L or P

20 <220>
 <221> VARIANT
 <222> (144)..(144)
 <223> X = A or S

25 <220>
 <221> VARIANT
 <222> (161)..(161)
 <223> X = E or D

30 <220>
 <221> VARIANT
 <222> (166)..(166)
 <223> X = Q or R

35 <220>
 <221> VARIANT
 <222> (180)..(180)
 <223> X = T or I

40 <220>
 <221> VARIANT
 <222> (196)..(196)
 <223> X = V or A

45 <220>
 <221> VARIANT
 <222> (197)..(197)
 <223> X = T or A

50 <220>
 <221> VARIANT
 <222> (212)..(212)
 <223> X = G or V

55 <220>
 <221> VARIANT
 <222> (214)..(214)
 <223> X = C or G

60 <400> 17
 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15

65 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45

5 Xaa Ala Ala Xaa Xaa Thr Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60

10 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80

15 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95

20 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

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

25 Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa
 130 135 140

30 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

35 Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

40 Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

45 Phe Asn Arg Xaa Glu Xaa
 210

50 <210> 18
 <211> 214
 <212> PRT
 <213> Artificial Sequence

55 <220>
 <223> modified light chain

60 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

65 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

5 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M

10 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

15 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

20 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

25 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

30 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

35 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

40 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

45 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

50 <220>
 <221> VARIANT
 <222> (53)..(53)
 <223> X = T, W, S, Y, G or V

55 <220>
 <221> VARIANT
 <222> (54)..(54)
 <223> X = L, F, T or S

60 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

65 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

<220>

	<221> VARIANT
	<222> (57)..(57)
	<223> X = G or S
5	<220>
	<221> VARIANT
	<222> (58)..(58)
	<223> X = V or M
10	<220>
	<221> VARIANT
	<222> (78)..(78)
	<223> X = L or P
15	<220>
	<221> VARIANT
	<222> (80)..(80)
	<223> X = P or Q
20	<220>
	<221> VARIANT
	<222> (92)..(92)
	<223> X = N, D or I
25	<220>
	<221> VARIANT
	<222> (93)..(93)
	<223> X = R, Q, K or M
30	<220>
	<221> VARIANT
	<222> (94)..(94)
	<223> X = A, P or S
35	<220>
	<221> VARIANT
	<222> (95)..(95)
	<223> X = P, F, Q, A, S, M, E or V
40	<220>
	<221> VARIANT
	<222> (104)..(104)
	<223> X = V or I
45	<220>
	<221> VARIANT
	<222> (129)..(129)
	<223> X = T or A
50	<220>
	<221> VARIANT
	<222> (136)..(136)
	<223> X = L or P
55	<220>
	<221> VARIANT
	<222> (144)..(144)
	<223> X = A or S
60	<220>
	<221> VARIANT
	<222> (161)..(161)
	<223> X = E or D
65	<220>
	<221> VARIANT
	<222> (166)..(166)


```

<223>  X = Q or R

<220>
<221>  VARIANT
5  <222>  (180)..(180)
   <223>  X = T or I

<220>
<221>  VARIANT
10 <222>  (196)..(196)
   <223>  X = V or A

<220>
<221>  VARIANT
15 <222>  (197)..(197)
   <223>  X = T or A

<220>
<221>  VARIANT
20 <222>  (212)..(212)
   <223>  X = G or V

<220>
<221>  VARIANT
25 <222>  (214)..(214)
   <223>  X = C or G

<400>  18

30  Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
    1             5             10             15

35  Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Met Xaa Xaa Arg Asn Tyr
    20             25             30

40  Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
    35             40             45

45  Xaa Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
    50             55             60

50  Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
    65             70             75             80

55  Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
    85             90             95

60  Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
    100            105            110

65  Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
    115            120            125

70  Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa
    130            135            140

75  Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
    145            150            155            160

```

Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

5

Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

10

Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

15 Phe Asn Arg Xaa Glu Xaa
210

20

<210> 19
 <211> 214
 <212> PRT
 <213> Artificial Sequence

25

<220>
 <223> modified light chain

30

<220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

35

<220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

40

<220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M

45

<220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

50

<220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

55

<220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

60

<220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K

65

<220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

5
10
15
20
25
30
35
40
45
50
55
60
65

<220>
<221> VARIANT
<222> (29)..(29)
<223> X = I, V or L

<220>
<221> VARIANT
<222> (41)..(41)
<223> X = G or S

<220>
<221> VARIANT
<222> (49)..(49)
<223> X = Y, R, V, W, G or S

<220>
<221> VARIANT
<222> (52)..(52)
<223> X = S, G, N or W

<220>
<221> VARIANT
<222> (53)..(53)
<223> X = T, W, S, Y, G or V

<220>
<221> VARIANT
<222> (54)..(54)
<223> X = L, F, T or S

<220>
<221> VARIANT
<222> (55)..(55)
<223> X = Q, K, I, E, G, V, T, R, S or L

<220>
<221> VARIANT
<222> (56)..(56)
<223> X = S, K or R

<220>
<221> VARIANT
<222> (57)..(57)
<223> X = G or S

<220>
<221> VARIANT
<222> (58)..(58)
<223> X = V or M

<220>
<221> VARIANT
<222> (78)..(78)
<223> X = L or P

<220>
<221> VARIANT
<222> (80)..(80)
<223> X = P or Q

<220>
<221> VARIANT
<222> (93)..(93)
<223> X = R, Q, K or M

<220>
<221> VARIANT

```

<222> (94)..(94)
<223> X = A, P or S

5  <220>
    <221> VARIANT
    <222> (95)..(95)
    <223> X = P, F, Q, A, S, M, E or V

10 <220>
    <221> VARIANT
    <222> (104)..(104)
    <223> X = V or I

15 <220>
    <221> VARIANT
    <222> (129)..(129)
    <223> X = T or A

20 <220>
    <221> VARIANT
    <222> (136)..(136)
    <223> X = L or P

25 <220>
    <221> VARIANT
    <222> (144)..(144)
    <223> X = A or S

30 <220>
    <221> VARIANT
    <222> (161)..(161)
    <223> X = E or D

35 <220>
    <221> VARIANT
    <222> (166)..(166)
    <223> X = Q or R

40 <220>
    <221> VARIANT
    <222> (180)..(180)
    <223> X = T or I

45 <220>
    <221> VARIANT
    <222> (196)..(196)
    <223> X = V or A

50 <220>
    <221> VARIANT
    <222> (197)..(197)
    <223> X = T or A

55 <220>
    <221> VARIANT
    <222> (212)..(212)
    <223> X = G or V

60 <220>
    <221> VARIANT
    <222> (214)..(214)
    <223> X = C or G

65 <400> 19
    Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
    1          5          10          15

```

5 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15 Xaa Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Xaa Xaa Xaa Tyr
 85 90 95
 30 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 35 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 40 Xaa Ala Ser Val Val Cys Leu Xaa Asn Asn Phe Tyr Pro Arg Glu Xaa
 130 135 140
 45 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 50 Xaa Ser Val Thr Glu Xaa Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 55 Ser Thr Leu Xaa Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 60 Ala Cys Glu Xaa Xaa His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 65 Phe Asn Arg Xaa Glu Xaa
 210
 65 <210> 20
 <211> 120
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> modified heavy chain VH
 65 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X= E or K

5 <220>
 <221> VARIANT
 <222> (3)..(3)
 <223> X = Q or R

10 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = V or I

15 <220>
 <221> VARIANT
 <222> (13)..(13)
 <223> X = Q or H

20 <220>
 <221> VARIANT
 <222> (16)..(16)
 <223> X = R or H

25 <220>
 <221> VARIANT
 <222> (23)..(23)
 <223> X = A, V or T

30 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = A or S

35 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = T or S

40 <220>
 <221> VARIANT
 <222> (30)..(30)
 <223> X = D, G or R

45 <220>
 <221> VARIANT
 <222> (31)..(31)
 <223> X = D,H, Q, G, T, N or R

50 <220>
 <221> VARIANT
 <222> (32)..(32)
 <223> X = Y, F, R, Q or S

55 <220>
 <221> VARIANT
 <222> (34)..(34)
 <223> X = M or I

60 <220>
 <221> VARIANT
 <222> (39)..(39)
 <223> X = Q or R

65 <220>
 <221> VARIANT
 <222> (40)..(40)
 <223> X = A or V

<220>

```

<221>  VARIANT
<222>  (50)..(50)
<223>  X = A or G

5  <220>
    <221>  VARIANT
    <222>  (58)..(58)
    <223>  X = I, V or T

10 <220>
    <221>  VARIANT
    <222>  (65)..(65)
    <223>  X = E or R

15 <220>
    <221>  VARIANT
    <222>  (66)..(66)
    <223>  X = G or N

20 <220>
    <221>  VARIANT
    <222>  (100)..(100)
    <223>  X = S or K

25 <220>
    <221>  VARIANT
    <222>  (103)..(103)
    <223>  X = S, Q or P

30 <220>
    <221>  VARIANT
    <222>  (107)..(107)
    <223>  X = S or Q

35 <400>  20

Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
1          5          10          15

40 Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Xaa
    20          25          30

45 Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
    35          40          45

50 Ser Xaa Ile Thr Trp Asn Ser Gly His Xaa Asp Tyr Ala Asp Ser Val
    50          55          60

Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65          70          75          80

55 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
    85          90          95

60 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
    100          105          110

65 Gln Gly Thr Leu Val Thr Val Ser
    115          120

```

<210> 21
<211> 120
<212> PRT
5 <213> Artificial Sequence

<220>
<223> modified heavy chain VH

10
<220>
<221> VARIANT
<222> (1)..(1)
<223> X= E or K

15
<220>
<221> VARIANT
<222> (3)..(3)
<223> X = Q or R

20
<220>
<221> VARIANT
<222> (5)..(5)
<223> X = V or I

25
<220>
<221> VARIANT
<222> (13)..(13)
<223> X = Q or H

30
<220>
<221> VARIANT
<222> (16)..(16)
<223> X = R or H

35
<220>
<221> VARIANT
<222> (23)..(23)
<223> X = A, V or T

40
<220>
<221> VARIANT
<222> (24)..(24)
<223> X = A or S

45
<220>
<221> VARIANT
<222> (28)..(28)
<223> X = T or S

50
<220>
<221> VARIANT
<222> (30)..(30)
<223> X = D, G or R

55
<220>
<221> VARIANT
<222> (31)..(31)
<223> X = D,H, Q, G, T, N or R

60
<220>
<221> VARIANT
<222> (32)..(32)
<223> X = F, R or Q

65
<220>
<221> VARIANT


```

<222> (34)..(34)
<223> X = M or I

5  <220>
    <221> VARIANT
    <222> (39)..(39)
    <223> X = Q or R

10 <220>
    <221> VARIANT
    <222> (40)..(40)
    <223> X = A or V

15 <220>
    <221> VARIANT
    <222> (50)..(50)
    <223> X = A or G

20 <220>
    <221> VARIANT
    <222> (58)..(58)
    <223> X = I, V or T

25 <220>
    <221> VARIANT
    <222> (65)..(65)
    <223> X = E or R

30 <220>
    <221> VARIANT
    <222> (66)..(66)
    <223> X = G or N

35 <220>
    <221> VARIANT
    <222> (100)..(100)
    <223> X = S or K

40 <220>
    <221> VARIANT
    <222> (103)..(103)
    <223> X = S, Q or P

45 <220>
    <221> VARIANT
    <222> (107)..(107)
    <223> X = S or Q

50 <400> 21
    Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
    1          5          10          15

55 Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Xaa
    20          25          30

60 Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
    35          40          45

    Ser Xaa Ile Thr Trp Asn Ser Gly His Xaa Asp Tyr Ala Asp Ser Val
    50          55          60

65 Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr

```

	65		70		75		80
--	----	--	----	--	----	--	----

5	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90				95		

10	Ala	Lys	Val	Xaa	Tyr	Leu	Xaa	Thr	Ala	Ser	Xaa	Leu	Asp	Tyr	Trp	Gly
			100						105					110		

	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser
			115					120

15																
	<210>	22														
	<211>	120														
	<212>	PRT														
20	<213>	Artificial Sequence														
	<220>															
	<223>	modified heavy chain VH														

25	<220>															
	<221>	VARIANT														
	<222>	(1)..(1)														
	<223>	X= E or K														

30	<220>															
	<221>	VARIANT														
	<222>	(3)..(3)														
	<223>	X = Q or R														

35	<220>															
	<221>	VARIANT														
	<222>	(5)..(5)														
	<223>	X = V or I														

40	<220>															
	<221>	VARIANT														
	<222>	(13)..(13)														
	<223>	X = Q or H														

45	<220>															
	<221>	VARIANT														
	<222>	(16)..(16)														
	<223>	X = R or H														

50	<220>															
	<221>	VARIANT														
	<222>	(23)..(23)														
	<223>	X = A, V or T														

55	<220>															
	<221>	VARIANT														
	<222>	(24)..(24)														
	<223>	X = A or S														

60	<220>															
	<221>	VARIANT														
	<222>	(28)..(28)														
	<223>	X = T or S														

65	<220>															
	<221>	VARIANT														
	<222>	(30)..(30)														

<223> X = D, G or R
 <220>
 <221> VARIANT
 5 <222> (31)..(31)
 <223> X = D,H, Q, G, T, N or R
 <220>
 <221> VARIANT
 10 <222> (34)..(34)
 <223> X = M or I
 <220>
 <221> VARIANT
 15 <222> (39)..(39)
 <223> X = Q or R
 <220>
 <221> VARIANT
 20 <222> (40)..(40)
 <223> X = A or V
 <220>
 <221> VARIANT
 25 <222> (50)..(50)
 <223> X = A or G
 <220>
 <221> VARIANT
 30 <222> (58)..(58)
 <223> X = I, V or T
 <220>
 <221> VARIANT
 35 <222> (65)..(65)
 <223> X = E or R
 <220>
 <221> VARIANT
 40 <222> (66)..(66)
 <223> X = G or N
 <220>
 <221> VARIANT
 45 <222> (100)..(100)
 <223> X = S or K
 <220>
 <221> VARIANT
 50 <222> (103)..(103)
 <223> X = S, Q or P
 <220>
 <221> VARIANT
 55 <222> (107)..(107)
 <223> X = S or Q
 <400> 22
 60 Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
 1 5 10 15
 65 Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Phe
 20 25 30

Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

5 Ser Xaa Ile Thr Trp Asn Ser Gly His Xaa Asp Tyr Ala Asp Ser Val
50 55 60

10 Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

20 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser
115 120

25 <210> 23
<211> 120
<212> PRT
<213> Artificial Sequence

30 <220>
<223> modified heavy chain VH

35 <220>
<221> VARIANT
<222> (13)..(13)
<223> X = Q or H

40 <220>
<221> VARIANT
<222> (30)..(30)
<223> X = D or G

45 <220>
<221> VARIANT
<222> (100)..(100)
<223> X = S or K

50 <220>
<221> VARIANT
<222> (103)..(103)
<223> X = S or P

55 <400> 23

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Arg
1 5 10 15

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Xaa Gln Phe
20 25 30

65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser
 115 120

20 <210> 24
 <211> 120
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> modified heavy chain VH

30 <220>
 <221> VARIANT
 <222> (13)..(13)
 <223> X = Q or H

35 <220>
 <221> VARIANT
 <222> (100)..(100)
 <223> X = S or K

40 <220>
 <221> VARIANT
 <222> (103)..(103)
 <223> X = S or P

45 <400> 24

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Arg
 1 5 10 15

50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe
 20 25 30

55 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

60 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

65 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys


```

<222> (31)..(31)
<223> X = D,H, Q, G, T, N or R

5
<220>
<221> VARIANT
<222> (32)..(32)
<223> X = Y, F, R, Q or S

10
<220>
<221> VARIANT
<222> (34)..(34)
<223> X = M or I

15
<220>
<221> VARIANT
<222> (39)..(39)
<223> X = Q or R

20
<220>
<221> VARIANT
<222> (40)..(40)
<223> X = A or V

25
<220>
<221> VARIANT
<222> (50)..(50)
<223> X = A or G

30
<220>
<221> VARIANT
<222> (65)..(65)
<223> X = E or R

35
<220>
<221> VARIANT
<222> (66)..(66)
<223> X = G or N

40
<220>
<221> VARIANT
<222> (100)..(100)
<223> X = S or K

45
<220>
<221> VARIANT
<222> (103)..(103)
<223> X = S, Q or P

50
<220>
<221> VARIANT
<222> (107)..(107)
<223> X = S or Q

55
<400> 25
Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
1          5          10          15

60
Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Xaa Xaa Xaa
20          25          30

65
Ala Xaa His Trp Val Arg Xaa Xaa Pro Gly Lys Gly Leu Glu Trp Val
35          40          45

```

	Ser	Xaa	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val
	50					55						60				

5	Xaa	Xaa	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80

10	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85					90					95	

15	Ala	Lys	Val	Xaa	Tyr	Leu	Xaa	Thr	Ala	Ser	Xaa	Leu	Asp	Tyr	Trp	Gly
				100					105					110		

	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser
			115					120

20																
	<210>	26														
	<211>	120														
	<212>	PRT														
	<213>	Artificial Sequence														

25																
	<220>															
	<223>	modified heavy chain VH														

30																
	<220>															
	<221>	VARIANT														
	<222>	(1)..(1)														
	<223>	X= E or K														

35																
	<220>															
	<221>	VARIANT														
	<222>	(3)..(3)														
	<223>	X = Q or R														

40																
	<220>															
	<221>	VARIANT														
	<222>	(5)..(5)														
	<223>	X = V or I														

45																
	<220>															
	<221>	VARIANT														
	<222>	(13)..(13)														
	<223>	X = Q or H														

50																
	<220>															
	<221>	VARIANT														
	<222>	(16)..(16)														
	<223>	X = R or H														

55																
	<220>															
	<221>	VARIANT														
	<222>	(23)..(23)														
	<223>	X = A, V or T														

60																
	<220>															
	<221>	VARIANT														
	<222>	(24)..(24)														
	<223>	X = A or S														

65																
	<220>															
	<221>	VARIANT														
	<222>	(28)..(28)														

<223> X = T or S
 <220>
 <221> VARIANT
 5 <222> (31)..(31)
 <223> X = D,H, Q, G, T, N or R
 <220>
 <221> VARIANT
 10 <222> (32)..(32)
 <223> X = Y, F, R, Q or S
 <220>
 <221> VARIANT
 15 <222> (34)..(34)
 <223> X = M or I
 <220>
 <221> VARIANT
 20 <222> (39)..(39)
 <223> X = Q or R
 <220>
 <221> VARIANT
 25 <222> (40)..(40)
 <223> X = A or V
 <220>
 <221> VARIANT
 30 <222> (50)..(50)
 <223> X = A or G
 <220>
 <221> VARIANT
 35 <222> (65)..(65)
 <223> X = E or R
 <220>
 <221> VARIANT
 40 <222> (66)..(66)
 <223> X = G or N
 <220>
 <221> VARIANT
 45 <222> (100)..(100)
 <223> X = S or K
 <220>
 <221> VARIANT
 50 <222> (103)..(103)
 <223> X = S, Q or P
 <220>
 <221> VARIANT
 55 <222> (107)..(107)
 <223> X = S or Q
 <400> 26
 60 Xaa Val Xaa Leu Xaa Glu Ser Gly Gly Gly Leu Val Xaa Pro Gly Xaa
 1 5 10 15
 65 Ser Leu Arg Leu Ser Cys Xaa Xaa Ser Gly Phe Xaa Phe Gly Xaa Xaa
 20 25 30

	Ala	Xaa	His	Trp	Val	Arg	Xaa	Xaa	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			

5	Ser	Xaa	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val
		50					55					60				

10	Xaa	Xaa	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80

15	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85					90					95	

20	Ala	Lys	Val	Xaa	Tyr	Leu	Xaa	Thr	Ala	Ser	Xaa	Leu	Asp	Tyr	Trp	Gly
			100						105					110		

	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser
			115					120

25	<210>	27
	<211>	107
	<212>	PRT
	<213>	Artificial Sequence

30	<220>	
	<223>	modified light chain VL

35	<220>	
	<221>	VARIANT
	<222>	(1)..(1)
	<223>	X = D or N

40	<220>	
	<221>	VARIANT
	<222>	(5)..(5)
	<223>	X = T or S

45	<220>	
	<221>	VARIANT
	<222>	(15)..(15)
	<223>	X = V or M

50	<220>	
	<221>	VARIANT
	<222>	(24)..(24)
	<223>	X = R, H, T, L or A

55	<220>	
	<221>	VARIANT
	<222>	(25)..(25)
	<223>	X = A, T, S or G

60	<220>	
	<221>	VARIANT
	<222>	(26)..(26)
	<223>	X = S or T

65	<220>	
	<221>	VARIANT
	<222>	(27)..(27)
	<223>	X = Q, M, L, Y, V, W or K

5 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

10 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

15 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

20 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

25 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

30 <220>
 <221> VARIANT
 <222> (53)..(53)
 <223> X = T, W, S, Y, G or V

35 <220>
 <221> VARIANT
 <222> (54)..(54)
 <223> X = L, F, T or S

40 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

45 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

50 <220>
 <221> VARIANT
 <222> (57)..(57)
 <223> X = G or S

55 <220>
 <221> VARIANT
 <222> (58)..(58)
 <223> X = V or M

60 <220>
 <221> VARIANT
 <222> (78)..(78)
 <223> X = L or P

65 <220>
 <221> VARIANT
 <222> (80)..(80)
 <223> X = P or Q

 <220>

<221> VARIANT
 <222> (92)..(92)
 <223> X = N, D or I

5 <220>
 <221> VARIANT
 <222> (93)..(93)
 <223> X = R, Q, K or M

10 <220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A, P or S

15 <220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

20 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

25 <400> 27
 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15

30 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

35 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40 Xaa Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60

45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95

50 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
 100 105

55 <210> 28
 <211> 107
 <212> PRT
 <213> Artificial Sequence

60 <220>
 <223> modified light chain VL

65 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

5 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

10 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M

15 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

20 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

25 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

30 <220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K

35 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

40 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

45 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

50 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

55 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

60 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

65 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

 <220>

<221> VARIANT
 <222> (57)..(57)
 <223> X = G or S

5

<220>
 <221> VARIANT
 <222> (58)..(58)
 <223> X = V or M

10

<220>
 <221> VARIANT
 <222> (78)..(78)
 <223> X = L or P

15

<220>
 <221> VARIANT
 <222> (80)..(80)
 <223> X = P or Q

20

<220>
 <221> VARIANT
 <222> (92)..(92)
 <223> X = N, D or I

25

<220>
 <221> VARIANT
 <222> (93)..(93)
 <223> X = R, Q, K or M

30

<220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A, P or S

35

<220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

40

<220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

45

<400> 28
 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15

50

Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

55

Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45

60

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

65

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr

85

90

95

5 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
 100 105

10 <210> 29
 <211> 107
 <212> PRT
 <213> Artificial Sequence

15 <220>
 <223> modified light chain VL

20 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

25 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

30 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M

35 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

40 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

45 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

50 <220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K

55 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

60 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

65 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

<220>

- <221> VARIANT
<222> (49)..(49)
<223> X = Y, R, V, W, G or S
- 5 <220>
<221> VARIANT
<222> (52)..(52)
<223> X = S, G, N or W
- 10 <220>
<221> VARIANT
<222> (54)..(54)
<223> X = L, F, T or S
- 15 <220>
<221> VARIANT
<222> (55)..(55)
<223> X = Q, K, I, E, G, V, T, R, S or L
- 20 <220>
<221> VARIANT
<222> (56)..(56)
<223> X = S, K or R
- 25 <220>
<221> VARIANT
<222> (57)..(57)
<223> X = G or S
- 30 <220>
<221> VARIANT
<222> (58)..(58)
<223> X = V or M
- 35 <220>
<221> VARIANT
<222> (78)..(78)
<223> X = L or P
- 40 <220>
<221> VARIANT
<222> (80)..(80)
<223> X = P or Q
- 45 <220>
<221> VARIANT
<222> (92)..(92)
<223> X = N, D or I
- 50 <220>
<221> VARIANT
<222> (93)..(93)
<223> X = R, Q, K or M
- 55 <220>
<221> VARIANT
<222> (94)..(94)
<223> X = A, P or S
- 60 <220>
<221> VARIANT
<222> (95)..(95)
<223> X = P, F, Q, A, S, M, E or V
- 65 <220>
<221> VARIANT
<222> (104)..(104)

<223> X = V or I

<400> 29

5 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
1 5 10 15

10 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
20 25 30

15 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
35 40 45

20 Xaa Ala Ala Xaa Ser Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
50 55 60

25 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
65 70 75 80

30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
85 90 95

35 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
100 105

<210> 30

<211> 107

35 <212> PRT

<213> Artificial Sequence

<220>

40 <223> modified light chain VL

<220>

<221> VARIANT

<222> (1)..(1)

45 <223> X = D or N

<220>

<221> VARIANT

<222> (5)..(5)

50 <223> X = T or S

<220>

<221> VARIANT

<222> (15)..(15)

55 <223> X = V or M

<220>

<221> VARIANT

<222> (24)..(24)

60 <223> X = R, H, T, L or A

<220>

<221> VARIANT

<222> (25)..(25)

65 <223> X = A, T, S or G

<220>

- <221> VARIANT
<222> (26)..(26)
<223> X = S or T
- 5 <220>
<221> VARIANT
<222> (27)..(27)
<223> X = Q, M, L, Y, V, W or K
- 10 <220>
<221> VARIANT
<222> (28)..(28)
<223> X = G, R, S, D, P or L
- 15 <220>
<221> VARIANT
<222> (29)..(29)
<223> X = I, V or L
- 20 <220>
<221> VARIANT
<222> (41)..(41)
<223> X = G or S
- 25 <220>
<221> VARIANT
<222> (49)..(49)
<223> X = Y, R, V, W, G or S
- 30 <220>
<221> VARIANT
<222> (52)..(52)
<223> X = S, G, N or W
- 35 <220>
<221> VARIANT
<222> (54)..(54)
<223> X = L, F, T or S
- 40 <220>
<221> VARIANT
<222> (55)..(55)
<223> X = Q, K, I, E, G, V, T, R, S or L
- 45 <220>
<221> VARIANT
<222> (56)..(56)
<223> X = S, K or R
- 50 <220>
<221> VARIANT
<222> (57)..(57)
<223> X = G or S
- 55 <220>
<221> VARIANT
<222> (58)..(58)
<223> X = V or M
- 60 <220>
<221> VARIANT
<222> (78)..(78)
<223> X = L or P
- 65 <220>
<221> VARIANT
<222> (80)..(80)

<223> X = P or Q
 <220>
 <221> VARIANT
 5 <222> (92)..(92)
 <223> X = N, D or I
 <220>
 <221> VARIANT
 10 <222> (93)..(93)
 <223> X = R, Q, K or M
 <220>
 <221> VARIANT
 15 <222> (94)..(94)
 <223> X = A, P or S
 <220>
 <221> VARIANT
 20 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V
 <220>
 <221> VARIANT
 25 <222> (104)..(104)
 <223> X = V or I
 <400> 30
 30 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15
 35 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30
 40 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 45 Xaa Ala Ala Xaa Trp Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60
 50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80
 55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
 100 105
 <210> 31
 <211> 107
 <212> PRT
 <213> Artificial Sequence
 <220>
 65 <223> modified light chain VL
 <220>

- <221> VARIANT
<222> (1)..(1)
<223> X = D or N
- 5 <220>
<221> VARIANT
<222> (5)..(5)
<223> X = T or S
- 10 <220>
<221> VARIANT
<222> (15)..(15)
<223> X = V or M
- 15 <220>
<221> VARIANT
<222> (24)..(24)
<223> X = R, H, T, L or A
- 20 <220>
<221> VARIANT
<222> (25)..(25)
<223> X = A, T, S or G
- 25 <220>
<221> VARIANT
<222> (26)..(26)
<223> X = S or T
- 30 <220>
<221> VARIANT
<222> (27)..(27)
<223> X = Q, M, L, Y, V, W or K
- 35 <220>
<221> VARIANT
<222> (28)..(28)
<223> X = G, R, S, D, P or L
- 40 <220>
<221> VARIANT
<222> (29)..(29)
<223> X = I, V or L
- 45 <220>
<221> VARIANT
<222> (41)..(41)
<223> X = G or S
- 50 <220>
<221> VARIANT
<222> (49)..(49)
<223> X = Y, R, V, W, G or S
- 55 <220>
<221> VARIANT
<222> (52)..(52)
<223> X = S, G, N or W
- 60 <220>
<221> VARIANT
<222> (53)..(53)
<223> X = W, S, Y, G or V
- 65 <220>
<221> VARIANT
<222> (54)..(54)

```

<223>  X = L, F, T or S

<220>
<221>  VARIANT
5  <222>  (55)..(55)
   <223>  X = Q, K, I, E, G, V, T, R, S or L

<220>
<221>  VARIANT
10 <222>  (56)..(56)
   <223>  X = S, K or R

<220>
<221>  VARIANT
15 <222>  (57)..(57)
   <223>  X = G or S

<220>
<221>  VARIANT
20 <222>  (58)..(58)
   <223>  X = V or M

<220>
<221>  VARIANT
25 <222>  (78)..(78)
   <223>  X = L or P

<220>
<221>  VARIANT
30 <222>  (80)..(80)
   <223>  X = P or Q

<220>
<221>  VARIANT
35 <222>  (92)..(92)
   <223>  X = N, D or I

<220>
<221>  VARIANT
40 <222>  (93)..(93)
   <223>  X = R, Q, K or M

<220>
<221>  VARIANT
45 <222>  (94)..(94)
   <223>  X = A, P or S

<220>
<221>  VARIANT
50 <222>  (95)..(95)
   <223>  X = P, F, Q, A, S, M, E or V

<220>
<221>  VARIANT
55 <222>  (104)..(104)
   <223>  X = V or I

<400>  31

60  Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
    1              5              10              15

65  Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
    20              25              30

```

	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Xaa	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35						40					45			
5	Xaa	Ala	Ala	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
10	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Xaa	Gln	Xaa
	65					70					75					80
15	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Xaa	Xaa	Xaa	Xaa	Tyr
					85					90					95	
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Xaa	Glu	Ile	Lys					
				100					105							
20																
	<210> 32															
	<211> 107															
	<212> PRT															
	<213> Artificial Sequence															
25																
	<220>															
	<223> modified light chain VL															
30																
	<220>															
	<221> VARIANT															
	<222> (1)..(1)															
	<223> X = D or N															
35																
	<220>															
	<221> VARIANT															
	<222> (5)..(5)															
	<223> X = T or S															
40																
	<220>															
	<221> VARIANT															
	<222> (15)..(15)															
	<223> X = V or M															
45																
	<220>															
	<221> VARIANT															
	<222> (24)..(24)															
	<223> X = R, H, T, L or A															
50																
	<220>															
	<221> VARIANT															
	<222> (25)..(25)															
	<223> X = A, T, S or G															
55																
	<220>															
	<221> VARIANT															
	<222> (26)..(26)															
	<223> X = S or T															
60																
	<220>															
	<221> VARIANT															
	<222> (27)..(27)															
	<223> X = Q, M, L, Y, V, W or K															
65																
	<220>															
	<221> VARIANT															
	<222> (28)..(28)															

	<223>	X = G, R, S, D, P or L
	<220>	
5	<221>	VARIANT
	<222>	(29)..(29)
	<223>	X = I, V or L
	<220>	
10	<221>	VARIANT
	<222>	(41)..(41)
	<223>	X = G or S
	<220>	
15	<221>	VARIANT
	<222>	(49)..(49)
	<223>	X = Y, R, V, W, G or S
	<220>	
20	<221>	VARIANT
	<222>	(52)..(52)
	<223>	X = S, G, N or W
	<220>	
25	<221>	VARIANT
	<222>	(53)..(53)
	<223>	X = T, W, S, Y, G or V
	<220>	
30	<221>	VARIANT
	<222>	(55)..(55)
	<223>	X = Q, K, I, E, G, V, T, R, S or L
	<220>	
35	<221>	VARIANT
	<222>	(56)..(56)
	<223>	X = S, K or R
	<220>	
40	<221>	VARIANT
	<222>	(57)..(57)
	<223>	X = G or S
	<220>	
45	<221>	VARIANT
	<222>	(58)..(58)
	<223>	X = V or M
	<220>	
50	<221>	VARIANT
	<222>	(78)..(78)
	<223>	X = L or P
	<220>	
55	<221>	VARIANT
	<222>	(80)..(80)
	<223>	X = P or Q
	<220>	
60	<221>	VARIANT
	<222>	(92)..(92)
	<223>	X = N, D or I
	<220>	
65	<221>	VARIANT
	<222>	(93)..(93)
	<223>	X = R, Q, K or M

5 <220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A, P or S

10 <220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

15 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I
 <400> 32

20 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15

25 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

30 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45

35 Xaa Ala Ala Xaa Xaa Thr Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60

40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80

45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95

50 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
 100 105

55 <210> 33
 <211> 107
 <212> PRT
 <213> Artificial Sequence

60 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

65 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

70 <220>
 <221> VARIANT
 <222> (15)..(15)

	<223>	X = V or M
	<220>	
5	<221>	VARIANT
	<222>	(24) .. (24)
	<223>	X = R, H, T, L or A
	<220>	
10	<221>	VARIANT
	<222>	(25) .. (25)
	<223>	X = A, T, S or G
	<220>	
15	<221>	VARIANT
	<222>	(26) .. (26)
	<223>	X = S or T
	<220>	
20	<221>	VARIANT
	<222>	(28) .. (28)
	<223>	X = G, R, S, D, P or L
	<220>	
25	<221>	VARIANT
	<222>	(29) .. (29)
	<223>	X = I, V or L
	<220>	
30	<221>	VARIANT
	<222>	(41) .. (41)
	<223>	X = G or S
	<220>	
35	<221>	VARIANT
	<222>	(49) .. (49)
	<223>	X = Y, R, V, W, G or S
	<220>	
40	<221>	VARIANT
	<222>	(52) .. (52)
	<223>	X = S, G, N or W
	<220>	
45	<221>	VARIANT
	<222>	(53) .. (53)
	<223>	X = T, W, S, Y, G or V
	<220>	
50	<221>	VARIANT
	<222>	(54) .. (54)
	<223>	X = L, F, T or S
	<220>	
55	<221>	VARIANT
	<222>	(55) .. (55)
	<223>	X = Q, K, I, E, G, V, T, R, S or L
	<220>	
60	<221>	VARIANT
	<222>	(56) .. (56)
	<223>	X = S, K or R
	<220>	
65	<221>	VARIANT
	<222>	(57) .. (57)
	<223>	X = G or S

5 <220>
 <221> VARIANT
 <222> (58)..(58)
 <223> X = V or M

 10 <220>
 <221> VARIANT
 <222> (78)..(78)
 <223> X = L or P

 15 <220>
 <221> VARIANT
 <222> (80)..(80)
 <223> X = P or Q

 20 <220>
 <221> VARIANT
 <222> (92)..(92)
 <223> X = N, D or I

 25 <220>
 <221> VARIANT
 <222> (93)..(93)
 <223> X = R, Q, K or M

 30 <220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A, P or S

 35 <220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

 40 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

 <400> 33

 45 Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15

 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Met Xaa Xaa Arg Asn Tyr
 20 25 30

 50 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45

 55 Xaa Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60

 60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80

 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95

 65 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys

100

105

5 <210> 34
 <211> 107
 <212> PRT
 <213> Artificial Sequence

10 <220>
 <223> modified light chain VL

15 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D or N

20 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = T or S

25 <220>
 <221> VARIANT
 <222> (15)..(15)
 <223> X = V or M

30 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

35 <220>
 <221> VARIANT
 <222> (25)..(25)
 <223> X = A, T, S or G

40 <220>
 <221> VARIANT
 <222> (26)..(26)
 <223> X = S or T

45 <220>
 <221> VARIANT
 <222> (27)..(27)
 <223> X = Q, M, L, Y, V, W or K

50 <220>
 <221> VARIANT
 <222> (28)..(28)
 <223> X = G, R, S, D, P or L

55 <220>
 <221> VARIANT
 <222> (29)..(29)
 <223> X = I, V or L

60 <220>
 <221> VARIANT
 <222> (41)..(41)
 <223> X = G or S

65 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

5 <220>
 <221> VARIANT
 <222> (52)..(52)
 <223> X = S, G, N or W

 10 <220>
 <221> VARIANT
 <222> (53)..(53)
 <223> X = T, W, S, Y, G or V

 15 <220>
 <221> VARIANT
 <222> (54)..(54)
 <223> X = L, F, T or S

 20 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

 25 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

 30 <220>
 <221> VARIANT
 <222> (57)..(57)
 <223> X = G or S

 35 <220>
 <221> VARIANT
 <222> (58)..(58)
 <223> X = V or M

 40 <220>
 <221> VARIANT
 <222> (78)..(78)
 <223> X = L or P

 45 <220>
 <221> VARIANT
 <222> (80)..(80)
 <223> X = P or Q

 50 <220>
 <221> VARIANT
 <222> (93)..(93)
 <223> X = R, Q, K or M

 55 <220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A, P or S

 60 <220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P, F, Q, A, S, M, E or V

 65 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

 <400> 34

Xaa Ile Gln Met Xaa Gln Ser Pro Ser Ser Leu Ser Ala Ser Xaa Gly
 1 5 10 15

5 Asp Arg Val Thr Ile Thr Cys Xaa Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

10 Leu Ala Trp Tyr Gln Gln Lys Pro Xaa Lys Ala Pro Lys Leu Leu Ile
 35 40 45

15 Xaa Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Xaa Gln Xaa
 65 70 75 80

20 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Xaa Xaa Xaa Tyr
 85 90 95

25 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
 100 105

30 <210> 35
 <211> 214
 <212> PRT
 <213> Artificial Sequence

35 <220>
 <223> modified light chain

40 <220>
 <221> VARIANT
 <222> (24)..(24)
 <223> X = R, H, T, L or A

45 <220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = Y, R, V, W, G or S

50 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q, K, I, E, G, V, T, R, S or L

55 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K, or R

60 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I

<400> 35

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

```

Asp Arg Val Thr Ile Thr Cys Xaa Ala Ser Gln Arg Leu Arg Asn Tyr
      20                25                30

5
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
      35                40                45

10
Xaa Ala Ala Ser Ser Thr Xaa Xaa Gly Val Pro Ser Arg Phe Ser Gly
      50                55                60

15
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
      65                70                75                80

20
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
      85                90                95

Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
      100               105               110

25
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
      115               120               125

30
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
      130               135               140

35
Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
      145               150               155               160

40
Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
      165               170               175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
      180               185               190

45
Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
      195               200               205

50
Phe Asn Arg Gly Glu Cys
      210

55
<210> 36
<211> 214
<212> PRT
<213> Artificial Sequence

60
<220>
<223> modified light chain

65
<220>
<221> VARIANT
<222> (24)..(24)
<223> X = R or T

```

<220>
 <221> VARIANT
 <222> (49)..(49)
 <223> X = R, W or G
 5
 <220>
 <221> VARIANT
 <222> (55)..(55)
 <223> X = Q or I
 10
 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S or R
 15
 <220>
 <221> VARIANT
 <222> (104)..(104)
 <223> X = V or I
 20
 <400> 36

 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 25
 Asp Arg Val Thr Ile Thr Cys Xaa Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30
 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 35
 Xaa Ala Ala Ser Ser Thr Xaa Xaa Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 40
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 45
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 50
 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 60
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 65
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr

180 185 190

5 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

10 Phe Asn Arg Gly Glu Cys
210

<210> 37
<211> 107
<212> PRT
15 <213> Artificial Sequence

<220>
<223> modified light chain VL

20 <220>
<221> VARIANT
<222> (24)..(24)
<223> X = R, H, T, L or A

25 <220>
<221> VARIANT
<222> (49)..(49)
<223> X = Y, R, V, W, G or S

30 <220>
<221> VARIANT
<222> (55)..(55)
<223> X = Q, K, I, E, G, V, T, R, S or L

35 <220>
<221> VARIANT
<222> (56)..(56)
<223> X = S, K, or R

40 <220>
<221> VARIANT
<222> (104)..(104)
<223> X = V or I

45 <400> 37

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

Asp Arg Val Thr Ile Thr Cys Xaa Ala Ser Gln Arg Leu Arg Asn Tyr
20 25 30

55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

60 Xaa Ala Ala Ser Ser Thr Xaa Xaa Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
85 90 95

5 Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
100 105

10	<210>	38
	<211>	107
	<212>	PRT
	<213>	Artificial Sequence

15 <220>
 <223> modified light chain VL

```

20      <220>
      <221>  VARIANT
      <222>  (24) .. (24)
      <223>  X = R or T

```

```

25      <220>
        <221>  VARIANT
        <222>  (49) .. (49)
        <223>  X = R, W or G

```

```

    <220>
    <221>  VARIANT
30  <222>  (55) .. (55)
    <223>  X = Q or I

```

```

35      <220>
      <221>  VARIANT
      <222>  (56) .. (56)
      <223>  X = S or R

```

```

    <220>
    <221>  VARIANT
40  <222>  (104)..(104)
    <223>  X = V or I

```

<400> 38

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

Asp Arg Val Thr Ile Thr Cys Xaa Ala Ser Gln Arg Leu Arg Asn Tyr
50 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

55

Xaa Ala Ala Ser Ser Thr Xaa Xaa Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Xaa Glu Ile Lys
 100 105

5
 <210> 39
 <211> 224
 <212> PRT
 <213> Artificial Sequence

10
 <220>
 <223> modified heavy chain

15
 <220>
 <221> VARIANT
 <222> (31)..(31)
 <223> X = D, Q or H

20
 <220>
 <221> VARIANT
 <222> (32)..(32)
 <223> X = Y or S

25
 <220>
 <221> VARIANT
 <222> (100)..(100)
 <223> X = S or K

30
 <220>
 <221> VARIANT
 <222> (103)..(103)
 <223> X = S or P

35
 <220>
 <221> VARIANT
 <222> (107)..(107)
 <223> X = S or Q

40
 <400> 39

 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

45
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Xaa Xaa
 20 25 30

50
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

60
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

65
 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
 100 105 110

5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

10 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

15 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

20 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

25 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

40 <210> 40
 <211> 120
 <212> PRT
 <213> Artificial Sequence

45 <220>
 <221> VARIANT
 <222> (31)..(31)
 <223> X = D, Q or H

50 <220>
 <221> VARIANT
 <222> (32)..(32)
 <223> X = Y or S

55 <220>
 <221> VARIANT
 <222> (100)..(100)
 <223> X = S or K

60 <220>
 <221> VARIANT
 <222> (103)..(103)
 <223> X = S or P

65 <220>
 <221> VARIANT
 <222> (107)..(107)
 <223> X = S or Q

65 <400> 40

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

1 5 10 15

5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Xaa Xaa
20 25 30

10 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

15 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

20 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

25 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

30 Ala Lys Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr Trp Gly
100 105 110

35 Gln Gly Thr Leu Val Thr Val Ser
115 120

<210> 41
<211> 214
<212> PRT
<213> Artificial Sequence

<220>
<223> modified light chain

40 <220>
<221> VARIANT
<222> (24)..(24)
<223> X = R or H

45 <220>
<221> VARIANT
<222> (27)..(27)
<223> X = Q, L, Y or K

50 <220>
<221> VARIANT
<222> (28)..(28)
<223> X = Q, R or S

55 <220>
<221> VARIANT
<222> (29)..(29)
<223> X = I or L

60 <220>
<221> VARIANT
<222> (54)..(54)
<223> X = L or F

65 <220>
<221> VARIANT

<222> (55)..(55)
 <223> X = Q, K or L

5 <220>
 <221> VARIANT
 <222> (56)..(56)
 <223> X = S, K or R

10 <220>
 <221> VARIANT
 <222> (92)..(92)
 <223> X = N or D

15 <220>
 <221> VARIANT
 <222> (93)..(93)
 <223> X = R, Q or K

20 <220>
 <221> VARIANT
 <222> (94)..(94)
 <223> X = A or P

25 <220>
 <221> VARIANT
 <222> (95)..(95)
 <223> X = P or Q

30 <400> 41
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

35 Asp Arg Val Thr Ile Thr Cys Xaa Ala Ser Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

40 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

45 Tyr Ala Ala Ser Thr Xaa Xaa Xaa Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95

60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln

	145		150		155		160
5	Glu Ser Val Thr	Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser					
		165		170		175	
10	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr						
		180		185		190	
15	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser						
		195		200		205	
20	Phe Asn Arg Gly Glu Cys						
		210					
25	<210> 42						
	<211> 107						
	<212> PRT						
	<213> Artificial Sequence						
30	<220>						
	<221> VARIANT						
	<222> (24)..(24)						
	<223> X = R or H						
35	<220>						
	<221> VARIANT						
	<222> (27)..(27)						
	<223> X = Q, L, Y or K						
40	<220>						
	<221> VARIANT						
	<222> (28)..(28)						
	<223> X = Q, R or S						
45	<220>						
	<221> VARIANT						
	<222> (29)..(29)						
	<223> X = I or L						
50	<220>						
	<221> VARIANT						
	<222> (54)..(54)						
	<223> X = L or F						
55	<220>						
	<221> VARIANT						
	<222> (55)..(55)						
	<223> X = Q, K or L						
60	<220>						
	<221> VARIANT						
	<222> (56)..(56)						
	<223> X = S, K or R						
65	<220>						
	<221> VARIANT						
	<222> (92)..(92)						
	<223> X = N or D						

<220>
 <221> VARIANT
 <222> (93)..(93)
 5 <223> X = R, Q or K

<220>
 <221> VARIANT
 <222> (94)..(94)
 10 <223> X = A or P

<220>
 <221> VARIANT
 <222> (95)..(95)
 15 <223> X = P or Q

<400> 42

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

Asp Arg Val Thr Ile Thr Cys Xaa Ala Ser Xaa Xaa Xaa Arg Asn Tyr
 20 25 30

25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

30 Tyr Ala Ala Ser Thr Xaa Xaa Xaa Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

35 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

40 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

45

<210> 43
 <211> 5
 <212> PRT
 50 <213> Artificial Sequence

<220>
 <223> modified VH CDR1 sequence

55

<220>
 <221> VARIANT
 <222> (1)..(1)
 60 <223> X = D,H, Q, G, T, N or R

<220>
 <221> VARIANT
 <222> (2)..(2)
 65 <223> X = Y, F, R, Q or S

<220>
 <221> VARIANT

<222> (4)..(4)
 <223> X = M or I

 <400> 43
 5 Xaa Xaa Ala Xaa His
 1 5

 10 <210> 44
 <211> 17
 <212> PRT
 <213> Artificial Sequence

 15 <220>
 <223> modified VH CDR2 sequence

 20 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = A or G

 25 <220>
 <221> VARIANT
 <222> (9)..(9)
 <223> X = I, V or T

 30 <220>
 <221> VARIANT
 <222> (16)..(16)
 <223> X = E or R

 35 <220>
 <221> VARIANT
 <222> (17)..(17)
 <223> X = G or N

 40 <400> 44
 Xaa Ile Thr Trp Asn Ser Gly His Xaa Asp Tyr Ala Asp Ser Val Xaa
 1 5 10 15

 45 Xaa

 50 <210> 45
 <211> 12
 <212> PRT
 <213> Artificial Sequence

 55 <220>
 <223> modified VH CDR3 sequence

 60 <220>
 <221> VARIANT
 <222> (2)..(2)
 <223> X = S or K

 65 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = S, Q or P

<220>
 <221> VARIANT
 <222> (9)..(9)
 <223> X = S or Q
 5 <400> 45

 Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr
 1 5 10
 10

 <210> 46
 <211> 5
 <212> PRT
 15 <213> Artificial Sequence

 <220>
 <223> modified VH CDR1 sequence
 20
 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = D,H or Q
 25
 <220>
 <221> VARIANT
 <222> (2)..(2)
 <223> X = Y or S
 30
 <400> 46

 Xaa Xaa Ala Met His
 1 5
 35

 <210> 47
 <211> 17
 <212> PRT
 40 <213> Artificial Sequence

 <220>
 <223> modified VH CDR2 sequence
 45 <400> 47

 Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val Glu
 1 5 10 15
 50 Gly

 55 <210> 48
 <211> 12
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> modified VH CDR3 sequence

 65 <220>
 <221> VARIANT
 <222> (2)..(2)
 <223> X = S or K

5 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = S or P

10 <220>
 <221> VARIANT
 <222> (9)..(9)
 <223> X = S or Q

<400> 48

15 Val Xaa Tyr Leu Xaa Thr Ala Ser Xaa Leu Asp Tyr
 1 5 10

20 <210> 49
 <211> 11
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> modified VL CDR1 sequence

30 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> X = R, H, T, L or A

35 <220>
 <221> VARIANT
 <222> (2)..(2)
 <223> X = A, T, S or G

40 <220>
 <221> VARIANT
 <222> (3)..(3)
 <223> X = S or T

45 <220>
 <221> VARIANT
 <222> (4)..(4)
 <223> X = Q, M, L, Y, V, W or K

50 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = G, R, S, D, P or L

55 <220>
 <221> VARIANT
 <222> (6)..(6)
 <223> X = I, V or L

<400> 49

60 Xaa Xaa Xaa Xaa Xaa Xaa Arg Asn Tyr Leu Ala
 1 5 10

65 <210> 50
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
<223> modified VL CDR2 sequence

5 <220>
<221> VARIANT
<222> (3)..(3)
<223> X = S, G, N or W

10 <220>
<221> VARIANT
<222> (4)..(4)
<223> X = T, W, S, Y, G or V

15 <220>
<221> VARIANT
<222> (5)..(5)
<223> X = L, F, T or S

20 <220>
<221> VARIANT
<222> (6)..(6)
<223> X = Q, K, I, E, G, V, T, R, S or L

25 <220>
<221> VARIANT
<222> (7)..(7)
<223> X = S, K or R

30 <400> 50

Ala Ala Xaa Xaa Xaa Xaa Xaa
1 5

35 <210> 51
<211> 9
<212> PRT
<213> Artificial Sequence

40 <220>
<223> modified VL CDR3 sequence

45 <220>
<221> VARIANT
<222> (4)..(4)
<223> X = N, D or I

50 <220>
<221> VARIANT
<222> (5)..(5)
<223> X = R, Q, K or M

55 <220>
<221> VARIANT
<222> (6)..(6)
<223> X = A, P or S

60 <220>
<221> VARIANT
<222> (7)..(7)
<223> X = P, F, Q, A, S, M, E or V

65 <400> 51

Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr Thr

```

1          5

5  <210>  52
   <211>  11
   <212>  PRT
   <213>  Artificial Sequence

10  <220>
   <223>  modified VL CDR1 sequence

15  <220>
   <221>  VARIANT
   <222>  (1)..(1)
   <223>  X = R or H

20  <220>
   <221>  VARIANT
   <222>  (4)..(4)
   <223>  X = Q, L, Y or K

25  <220>
   <221>  VARIANT
   <222>  (5)..(5)
   <223>  X = G, R or S

30  <220>
   <221>  VARIANT
   <222>  (6)..(6)
   <223>  X = I or L

   <400>  52

35  Xaa Ala Ser Xaa Xaa Xaa Arg Asn Tyr Leu Ala
    1          5          10

40  <210>  53
   <211>  7
   <212>  PRT
   <213>  Artificial Sequence

45  <220>
   <223>  modified VL CDR2 sequence

50  <220>
   <221>  VARIANT
   <222>  (5)..(5)
   <223>  X = L or F

55  <220>
   <221>  VARIANT
   <222>  (6)..(6)
   <223>  X = Q, K or L

60  <220>
   <221>  VARIANT
   <222>  (7)..(7)
   <223>  X = S, K or R

   <400>  53

65  Ala Ala Ser Thr Xaa Xaa Xaa
    1          5

```

5 <210> 54
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> modified VL CDR3 sequence

 10 <220>
 <221> VARIANT
 <222> (4)..(4)
 <223> X = N or D

 15 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> X = R, Q or K

 20 <220>
 <221> VARIANT
 <222> (6)..(6)
 <223> X = A or P

 25 <220>
 <221> VARIANT
 <222> (7)..(7)
 <223> X = P or Q

 30 <400> 54

 Gln Arg Tyr Xaa Xaa Xaa Xaa Tyr Thr
 1 5

 35 <210> 55
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> modified VH CDR1 sequence

 45 <400> 55

 Gln Phe Ala Met His
 1 5

 50 <210> 56
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 55 <220>
 <223> modified VL CDR3 sequence

 <400> 56

 60 Gln Arg Tyr Ile Gln Pro Pro Tyr Thr
 1 5

 65 <210> 57
 <211> 224
 <212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

5

<400> 57

10

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
20 25 30

15

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

20

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

25

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

30

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

35

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

40

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

45

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

50

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

55

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

60

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

65

<210> 58

<211> 224

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

5 <400> 58

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

10

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Phe
 20 25 30

15

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

20

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

25

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

30

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

35

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

40

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

45

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

55

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

60

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

<210> 59

<211> 224

65

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 59

5

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

10

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Gln
 20 25 30

15

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

20

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

25

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

30

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

35

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

40

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

45

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

55

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

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

60

<210> 60

<211> 224

<212> PRT

65

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 60

5 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Ser
 20 25 30
 15 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 20 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 25 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 30 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 35 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 45 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 50 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 55 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 60 <210> 61
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 65 <220>
 <223> recombinant TNF-alpha binder

<400> 61

[illegible]

<400> 62

5 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

 10 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 15 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 20 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

 30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

 40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

 60 <210> 63
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 <220>
 65 <223> recombinant TNF-alpha binder

 <400> 63

[illegible]

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 5 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 15 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 20 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 25 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 35 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 40 Glu Ser Val Thr Glu Arg Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 55
 <210> 65
 <211> 224
 <212> PRT
 60 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 65
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

	1		5		10		15									
5	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	His	Tyr
				20					25					30		
10	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
15	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
		50					55				60					
20	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75				80	
25	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
30	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
			100						105					110		
35	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
40	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
	130						135					140				
45	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145				150						155					160
50	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
				165						170					175	
55	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
			180						185					190		
60	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
		195						200					205			
65	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
70	<210>	66														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
75	<220>															
	<223>	recombinant TNF-alpha binder														
80	<400>	66														
85	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5						10				15	

5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asn Ser
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 10 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 45 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 50 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 55 <210> 67
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 67
 65 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asn Phe
 20 25 30
 5
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 10 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 45 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 50 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 55 <210> 68
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 68
 65 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Phe
 20 25 30

5 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

10 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

45 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 69
 <211> 224
 <212> PRT
 <213> Artificial Sequence

65 <220>
 <223> recombinant TNF-alpha binder

<400> 69

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asn Tyr

20 25 30
 5 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 45 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 50 <210> 70
 <211> 224
 <212> PRT
 55 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 60 <400> 70
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

5
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

10
Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

15
Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

20
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

25
Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

30
Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

35
Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

40
Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

45
Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

50
Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

55
Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
195 200 205

60
Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
210 215 220

65
<210> 71
<211> 214
<212> PRT
<213> Artificial Sequence

70
<220>
<223> recombinant TNF-alpha binder

75
<400> 71

80
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

85
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 5 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 10 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 15 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 20 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 25 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 30 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 35 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 Ser Thr Leu Ile Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 40 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 45 Phe Asn Arg Gly Glu Cys
 210
 50 <210> 72
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 55 <220>
 <223> recombinant TNF-alpha binder
 <400> 72
 60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Val Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

50 <210> 73
 <211> 214
 <212> PRT
 <213> Artificial Sequence

55 <220>
 <223> recombinant TNF-alpha binder
 <400> 73

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

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

65 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

	35	40	45
5	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	55	60
	50		
10	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	70	80
	65		
15	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr	85	95
		90	
	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	110
		105	
20	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	125
		120	
25	Ala Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	140
		135	
30	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	160
		150	155
	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	175
		170	
35	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	190
		185	
40	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	205
		200	
45	Phe Asn Arg Gly Glu Cys	210	
50	<210> 74		
	<211> 224		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
55	<400> 74		
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg		15
	1	5	10
60	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Arg Tyr	20	30
		25	
65	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val	35	45
		40	

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 50 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 55 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 75
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 60 <400> 75
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 70 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Thr Asp Tyr Ala Asp Ser Val
 50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

25 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

30 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

35 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

45 <210> 76
 <211> 224
 <212> PRT
 <213> Artificial Sequence

50 <220>
 <223> recombinant TNF-alpha binder

55 <400> 76
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

20 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

25 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

30 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

35 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

45 <210> 77
 <211> 224
 <212> PRT
 <213> Artificial Sequence

50 <220>
 <223> recombinant TNF-alpha binder
 <400> 77

55 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Gly Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val

50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

15 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

55 <210> 78
<211> 224
<212> PRT
<213> Artificial Sequence

60 <220>
<223> recombinant TNF-alpha binder

65 <400> 78

70 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

75 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

80 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

85 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

5	Glu 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ala 75	Lys	Asn	Ser	Leu	Tyr 80
	Leu	Gln	Met	Asn 85	Ser	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
10	Ala	Lys	Val	Lys 100	Tyr	Leu	Ser	Thr	Ala 105	Ser	Ser	Leu	Asp	Tyr 110	Trp	Gly
15	Gln	Gly	Thr 115	Leu	Val	Thr	Val	Ser 120	Ser	Ala	Ser	Thr	Lys 125	Gly	Pro	Ser
20	Val	Phe 130	Pro	Leu	Ala	Pro	Ser 135	Ser	Lys	Ser	Thr	Ser 140	Gly	Gly	Thr	Ala
25	Ala 145	Leu	Gly	Cys	Leu	Val 150	Lys	Asp	Tyr	Phe	Pro 155	Glu	Pro	Val	Thr	Val 160
	Ser	Trp	Asn	Ser	Gly 165	Ala	Leu	Thr	Ser	Gly 170	Val	His	Thr	Phe	Pro 175	Ala
30	Val	Leu	Gln	Ser 180	Ser	Gly	Leu	Tyr	Ser 185	Leu	Ser	Ser	Val	Val 190	Thr	Val
35	Pro	Ser	Ser 195	Ser	Leu	Gly	Thr	Gln 200	Thr	Tyr	Ile	Cys	Asn 205	Val	Asn	His
40	Lys 210	Pro	Ser	Asn	Thr	Lys	Val 215	Asp	Lys	Lys	Val	Glu 220	Pro	Lys	Ser	Cys
45	<210>	79														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
50	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	79														
55	Glu 1	Val	Gln	Leu	Val 5	Glu	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15	Arg
	Ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Asp 30	Asp	Tyr
60	Ala	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
65	Ser 50	Ala	Ile	Thr	Trp	Asn	Ser 55	Gly	His	Ile	Asp	Tyr 60	Ala	Asp	Ser	Val

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

5

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

10

Ala Lys Val Ser Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

15

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

20

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

25

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

30

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

35

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

40

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

45

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

<210> 80
 <211> 214
 <212> PRT
 <213> Artificial Sequence

50

<220>
 <223> recombinant TNF-alpha binder

55

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

60

Asp Arg Val Thr Ile Thr Cys Leu Ser Ser Gln Gly Leu Arg Asn Tyr
 20 25 30

65

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

5 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

10 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

15 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

20 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

25 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

30 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

35 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

40 <210> 81
 <211> 214
 <212> PRT
 <213> Artificial Sequence

45 <220>
 <223> recombinant TNF-alpha binder

50 <400> 81

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

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

60 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

	65		70		75		80
5	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr	85		90		95	
10	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100		105		110	
15	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115		120		125	
20	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130		135		140	
25	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145		150		155	160
30	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165		170		175	
35	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180		185		190	
40	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195		200		205	
45	Phe Asn Arg Gly Glu Cys	210					
50	<210> 82						
55	<211> 214						
60	<212> PRT						
65	<213> Artificial Sequence						
70	<220>						
75	<223> recombinant TNF-alpha binder						
80	<400> 82						
85	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5	10		15	
90	Asp Arg Val Thr Ile Thr Cys Leu Ser Ser Gln Gly Ile Arg Asn Tyr	20		25		30	
95	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35		40		45	
100	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	50		55		60	
105	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	65	70	75		80	

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 5
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 10
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 15
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 20
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 25
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 30
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 35
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 40
 Phe Asn Arg Gly Glu Cys
 210
 <210> 83
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 45
 <220>
 <223> recombinant TNF-alpha binder
 <400> 83
 50
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 55
 Asp Arg Val Thr Ile Thr Cys Thr Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 60
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 65
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 70
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asn	Arg	Ala	Pro	Tyr	
																	85
5																	90
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala	95
				100					105					110			
10	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	
			115					120					125				
15	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	
	130						135					140					
20	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	
	145					150					155					160	
	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser	
					165					170					175		
25	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr	
				180					185					190			
30	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser	
			195					200					205				
35	Phe	Asn	Arg	Gly	Glu	Cys											
		210															
40	<210>	84															
	<211>	214															
	<212>	PRT															
	<213>	Artificial Sequence															
	<220>																
	<223>	recombinant TNF-alpha binder															
45	<400>	84															
50	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	
	1				5					10					15		
	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ser	Ser	Gln	Gly	Ile	Arg	Asn	Tyr	
				20					25					30			
55	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	
			35					40					45				
60	Tyr	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	
		50					55					60					
65	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	
	65					70					75					80	

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

5 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

10 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

25 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

30 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

35 Phe Asn Arg Gly Glu Cys
 210

<210> 85
 <211> 214
 <212> PRT
 40 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

45 <400> 85

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

50 Asp Arg Val Thr Ile Thr Cys Leu Gly Ser Gln Gly Ile Arg Asn Tyr
 20 25 30

55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

60 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr

	85	90	95
5	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105 110
10	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120 125
15	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135 140
20	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150 155 160
25	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170 175
30	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185 190
35	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	200 205
40	Phe Asn Arg Gly Glu Cys	210	
45	<210> 86		
	<211> 214		
	<212> PRT		
	<213> Artificial Sequence		
50	<220>		
	<223> recombinant TNF-alpha binder		
55	<400> 86		
60	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5 10 15
65	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Leu Arg Asn Tyr	20	25 30
70	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35	40 45
75	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	50	55 60
80	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	65	70 75 80
85	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr	85	90 95

5 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 10 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 25 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30 Phe Asn Arg Gly Glu Cys
 210
 35 <210> 87
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 87
 45 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 50 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Pro Val Arg Asn Tyr
 20 25 30
 55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

5

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

10

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

15

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

20

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

25

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

30

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

35

Phe Asn Arg Gly Glu Cys
 210

<210> 88
 <211> 214
 <212> PRT
 <213> Artificial Sequence

40

<220>
 <223> recombinant TNF-alpha binder
 <400> 88

45

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

50

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Pro Leu Arg Asn Tyr
 20 25 30

55

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

60

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

65

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

5 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30 Phe Asn Arg Gly Glu Cys
 210

35 <210> 89
 <211> 214
 <212> PRT
 <213> Artificial Sequence

40 <220>
 <223> recombinant TNF-alpha binder
 <400> 89

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

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

50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

55 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala

	100	105	110
5	Pro Ser Val Phe Ile Phe Pro	Pro Ser Asp Glu Gln Leu Lys Ser Gly	
	115	120	125
10	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala		
	130	135	140
15	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln		
	145	150	155
20	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser		
	165	170	175
25	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr		
	180	185	190
30	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser		
	195	200	205
35	Phe Asn Arg Gly Glu Cys		
	210		
40	<210> 90		
	<211> 214		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
45	<400> 90		
50	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly		
	1	5	10
55	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr		
	20	25	30
60	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile		
	35	40	45
65	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly		
	50	55	60
70	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro		
	65	70	75
75	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr		
	85	90	95
80	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala		
	100	105	110

5 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 10 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 15 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 30 <210> 91
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 35 <220>
 <223> recombinant TNF-alpha binder
 <400> 91
 40 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 45 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Leu Gly Ile Arg Asn Tyr
 20 25 30
 50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

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

5

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

10

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

15

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

20

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30

Phe Asn Arg Gly Glu Cys
 210

35

<210> 92
 <211> 214
 <212> PRT
 <213> Artificial Sequence

40

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

45

Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Gly Ile Arg Asn Tyr
 20 25 30

50

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

55

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

65

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

70

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

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

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

10 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

15 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

20 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

25 Phe Asn Arg Gly Glu Cys
 210

30 <210> 93
 <211> 214
 <212> PRT
 <213> Artificial Sequence

35 <220>
 <223> recombinant TNF-alpha binder
 <400> 93

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

45 Asp Arg Val Thr Ile Thr Cys Arg Ala Thr Tyr Gly Ile Arg Asn Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

50 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

	115	120	125
5	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
10	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
15	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
20	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
25	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
30	Phe Asn Arg Gly Glu Cys 210		
35	<210> 94 <211> 214 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 94		
40	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
45	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Tyr Gly Ile Arg Asn Tyr 20 25 30		
50	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
55	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
60	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
65	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr 85 90 95		
	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		

5 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 15 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 20 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 25 Phe Asn Arg Gly Glu Cys
 210
 <210> 95
 <211> 214
 <212> PRT
 30 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 35 <400> 95
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Leu Ile Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 50 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

5

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

10

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

15

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

20

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

25

Phe Asn Arg Gly Glu Cys
 210

30

<210> 96
 <211> 214
 <212> PRT
 <213> Artificial Sequence

35

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

40

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

45

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

50

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

55

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

60

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

65

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

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

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

5 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

15 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20 Phe Asn Arg Gly Glu Cys
 210

25 <210> 97
 <211> 214
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 97

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

40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Trp Gly Ile Arg Asn Tyr
 20 25 30

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala

	130		135		140
5	Lys Val Gln Trp	Lys Val Asp Asn Ala Leu	Gln Ser Gly Asn Ser Gln		
	145	150	155		160
10	Glu Ser Val Thr	Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser			
		165	170		175
15	Ser Thr Leu Thr	Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr			
		180	185		190
20	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser				
		195	200		205
25	Phe Asn Arg Gly Glu Cys				
	210				
30	<210> 98				
	<211> 214				
	<212> PRT				
	<213> Artificial Sequence				
35	<220>				
	<223> recombinant TNF-alpha binder				
	<400> 98				
40	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly				
	1	5	10		15
45	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys Gly Ile Arg Asn Tyr				
		20	25		30
50	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile				
		35	40		45
55	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly				
		50	55		60
60	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro				
		65	70		75
65	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr				
		85	90		95
70	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala				
		100	105		110
75	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly				
		115	120		125
80	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala				
		130	135		140

5 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

15 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

20 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

25 Phe Asn Arg Gly Glu Cys
 210

30 <210> 99
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 <400> 99

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

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

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

50 Tyr Ala Ala Trp Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

70 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5

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

10

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20

Phe Asn Arg Gly Glu Cys
 210

<210> 100
 <211> 214
 <212> PRT
 <213> Artificial Sequence

25

<220>
 <223> recombinant TNF-alpha binder

30

<400> 100

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

35

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

40

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

45

Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60

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

65

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

20 <210> 101
 <211> 214
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

30 <400> 101

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

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

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Asn Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln

	145	150	155	160
5	Glu Ser Val Thr	Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser		
		165	170	175
10	Ser Thr Leu Thr	Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr		
		180	185	190
15	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser			
		195	200	205
20	Phe Asn Arg Gly Glu Cys			
	210			
25	<210> 102			
	<211> 214			
	<212> PRT			
	<213> Artificial Sequence			
30	<220>			
	<223> recombinant TNF-alpha binder			
	<400> 102			
35	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly			
	1	5	10	15
40	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr			
		20	25	30
45	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile			
		35	40	45
50	Tyr Ala Ala Ser Tyr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly			
		50	55	60
55	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro			
		65	70	75
60	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr			
		85	90	95
65	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala			
		100	105	110
70	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly			
		115	120	125
75	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala			
		130	135	140
80	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln			
		145	150	155
85				160

5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20 Phe Asn Arg Gly Glu Cys
 210

25 <210> 103
 <211> 224
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 103

35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

65 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

70 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

75 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

80 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 5
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 20 <210> 104
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 25 <400> 104
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 40 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 60 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

10 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

15 Phe Asn Arg Gly Glu Cys
 210

20 <210> 105
 <211> 214
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

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

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

40 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

45 Tyr Ala Ala Ser Gly Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

75 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

80 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser

	165	170	175
5	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
10	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
15	Phe Asn Arg Gly Glu Cys 210		
20	<210> 106 <211> 224 <212> PRT <213> Artificial Sequence		
25	<220> <223> recombinant TNF-alpha binder <400> 106		
30	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
35	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr 20 25 30		
40	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
45	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
50	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
55	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
60	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
65	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		
70	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
75	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
80	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		

5 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 10 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 15 <210> 107
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 107
 25 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Tyr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 60 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 65 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

5 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

10 Phe Asn Arg Gly Glu Cys
 210

15 <210> 108
 <211> 214
 <212> PRT
 <213> Artificial Sequence

20 <220>
 <223> recombinant TNF-alpha binder
 <400> 108

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

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

30 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

35 Tyr Ala Ala Ser Phe Leu Gln Ser Ser Val Pro Ser Arg Phe Ser Gly
 50 55 60

40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

50 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

60 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

65 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

5 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

10 Phe Asn Arg Gly Glu Cys
 210

15 <210> 109
 <211> 214
 <212> PRT
 <213> Artificial Sequence

20 <220>
 <223> recombinant TNF-alpha binder
 <400> 109

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

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

35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40 Tyr Ala Ala Ser Phe Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

70 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

75 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr

180 185 190
 5 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 10 Phe Asn Arg Gly Glu Cys
 210

 15 <210> 110
 <211> 214
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder

 20 <400> 110

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

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

 30 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

 35 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

 40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

 45 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

 50 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

 60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

5

Phe Asn Arg Gly Glu Cys
210

10

<210> 111
<211> 214
<212> PRT
<213> Artificial Sequence

15

<220>
<223> recombinant TNF-alpha binder

<400> 111

20

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

25

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

30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

35

Tyr Ala Ala Ser Val Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

40

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

45

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
85 90 95

50

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

55

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

60

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

65

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

70

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

75

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

5 Phe Asn Arg Gly Glu Cys
210

10 <210> 112
<211> 224
<212> PRT
<213> Artificial Sequence

15 <220>
<223> recombinant TNF-alpha binder
<400> 112

20 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

25 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

40 Arg Asn Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

40 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

45 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

60 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

65 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

10 <210> 113
 <211> 213
 <212> PRT
 <213> Artificial Sequence

15 <220>
 <223> recombinant TNF-alpha binder
 <400> 113

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

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

30 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

35 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser

	195	200	205
5	Phe Asn Arg Gly Glu 210		
10	<210> 114 <211> 214 <212> PRT <213> Artificial Sequence		
15	<220> <223> recombinant TNF-alpha binder <400> 114		
20	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
25	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 25 30		
30	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
35	Tyr Ala Ala Ser Thr Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
40	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
45	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr 85 90 95		
50	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
55	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
60	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
65	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		

Phe Asn Arg Gly Glu Cys
 210
 5
 <210> 115
 <211> 214
 <212> PRT
 10 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 15 <400> 115
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 20 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 30 Tyr Ala Ala Ser Thr Ser Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 35 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 50 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 60 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 65 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
210

5

<210> 116
<211> 214
<212> PRT
<213> Artificial Sequence

10

<220>
<223> recombinant TNF-alpha binder

<400> 116

15

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

20

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

25

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

30

Tyr Ala Ala Asn Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

35

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
85 90 95

40

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

45

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

50

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

55

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

60

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

65

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

5 <210> 117
<211> 214
<212> PRT
<213> Artificial Sequence

10 <220>
<223> recombinant TNF-alpha binder

<400> 117

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

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

25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

30 Tyr Ala Ala Ser Thr Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

35 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

40 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
85 90 95

45 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

50 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

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

60 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

65 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

70 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

75 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

80 Phe Asn Arg Gly Glu Cys

210

5 <210> 118
 <211> 214
 <212> PRT
 <213> Artificial Sequence

 10 <220>
 <223> recombinant TNF-alpha binder

 <400> 118

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

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

 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 35 40 45

 25 Tyr Ala Ala Ser Thr Thr Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

 30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

 35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 40 100 105 110

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

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

 50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

 55 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 60 180 185 190

 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 65 Phe Asn Arg Gly Glu Cys
 210

5 <210> 119
 <211> 214
 <212> PRT
 <213> Artificial Sequence

 10 <220>
 <223> recombinant TNF-alpha binder
 <400> 119

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

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

 20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

 25 Tyr Ala Ala Ser Thr Thr Leu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

 30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

 35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

 40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

 50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

 55 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

 60 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 65 Phe Asn Arg Gly Glu Cys
 210

<210> 120
 <211> 214
 <212> PRT
 5 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder
 10 <400> 120

 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 15 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 25 Tyr Ala Ala Asn Tyr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 50 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 70 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 75 Phe Asn Arg Gly Glu Cys
 210

<210> 121
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 5
 <220>
 <223> recombinant TNF-alpha binder
 <400> 121
 10 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 15 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 25 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 35 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 45 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 50 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 55 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 60 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 65
 <210> 122

<211> 214
 <212> PRT
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder

<400> 122

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

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

20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

25 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Lys Pro Pro Tyr
 85 90 95

40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

60 Phe Asn Arg Gly Glu Cys
 210

65 <210> 123
 <211> 214

<212> PRT

<213> Artificial Sequence

<220>

5 <223> recombinant TNF-alpha binder

<400> 123

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

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

20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

25 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
85 90 95

40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

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

55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

70 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

75 Phe Asn Arg Gly Glu Cys
210

65 <210> 124

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 124

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Met Pro Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

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

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

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

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 125

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

5 <400> 125

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

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

15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

20 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

25 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Gln Pro Pro Tyr
 85 90 95

30 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

35 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

45 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

50 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

55 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

60 Phe Asn Arg Gly Glu Cys
 210

<210> 126

<211> 214

65 <212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 126

5

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

10

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

15

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

20

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

25

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

30

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

35

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

40

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

45

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

50

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

60

<210> 127

<211> 214

<212> PRT

65

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 127

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Met Ala Pro Tyr
 85 90 95
 30 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 35 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 45 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 50 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 55 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 60 <210> 128
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 65 <220>
 <223> recombinant TNF-alpha binder

<400> 128

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 20 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 25 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
 85 90 95
 35 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 45 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 55 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 60 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 65 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 70 Phe Asn Arg Gly Glu Cys
 210
 75 <210> 129
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 80 <220>
 <223> recombinant TNF-alpha binder

<400> 129

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Gln Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 45 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 60 <210> 130
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 65 <220>
 <223> recombinant TNF-alpha binder
 <400> 130

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 5
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 10
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 20
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Ala Tyr
 85 90 95
 25
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55
 Phe Asn Arg Gly Glu Cys
 210
 60
 <210> 131
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65
 <400> 131

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 5 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 20 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Ser Tyr
 85 90 95
 25 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 <210> 132
 <211> 214
 <212> PRT
 60 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 132
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Met Gly

1	5	10	15
5	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr	20	25
10	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35	40
15	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	50	55
20	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	65	70
25	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Met Tyr	85	90
30	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105
35	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120
40	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135
45	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150
50	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170
55	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185
60	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	200
65	Phe Asn Arg Gly Glu Cys	210	
	<210> 133		
	<211> 214		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
	<400> 133		
	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5
		10	15

5 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 10 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 15 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 20 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Glu Tyr
 85 90 95
 25 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 30 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 35 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 50 Phe Asn Arg Gly Glu Cys
 210
 55 <210> 134
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 134
 65 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 5
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 10
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 15
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 20
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Val Tyr
 85 90 95
 25
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 45
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 50
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 55
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 60
 Phe Asn Arg Gly Glu Cys
 210
 <210> 135
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 <400> 135
 65
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

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

5 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

10 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

15 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

20 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Arg Ala Pro Tyr
 85 90 95

25 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

35 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

55 Phe Asn Arg Gly Glu Cys
 210

<210> 136
 <211> 214
 <212> PRT
 <213> Artificial Sequence

60 <220>
 <223> recombinant TNF-alpha binder

65 <400> 136

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

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr

	20	25	30
5	Leu Ala Trp Tyr Gln Gln Lys	Pro Gly Lys Ala Pro	Lys Leu Leu Ile
	35	40	45
10	Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly		
	50	55	60
15	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro		
	65	70	75 80
20	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Lys Ala Pro Tyr		
	85	90	95
25	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala		
	100	105	110
30	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly		
	115	120	125
35	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala		
	130	135	140
40	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln		
	145	150	155 160
45	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser		
	165	170	175
50	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr		
	180	185	190
55	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser		
	195	200	205
60	Phe Asn Arg Gly Glu Cys		
	210		
65	<210> 137		
	<211> 214		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
70	<400> 137		
75	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly		
	1	5	10 15
80	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr		
	20	25	30

5 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 10 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 15 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 20 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 25 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 30 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 35 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 <210> 138
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 138
 65 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 70 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 5
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 10 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 15 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Met Ala Pro Tyr
 85 90 95
 20 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 25 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 30 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 35 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 40 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 45 Phe Asn Arg Gly Glu Cys
 210
 50 <210> 139
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 55 <220>
 <223> recombinant TNF-alpha binder
 <400> 139
 60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

60 <210> 140
 <211> 214
 <212> PRT
 <213> Artificial Sequence

65 <220>
 <223> recombinant TNF-alpha binder
 <400> 140

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

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

80 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

	35	40	45
5	Tyr Ala Ala Asn Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
10	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
15	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Lys Pro Pro Tyr 85 90 95		
20	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
25	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
30	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
35	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
40	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
45	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
50	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
55	Phe Asn Arg Gly Glu Cys 210		
60	<210> 141 <211> 224 <212> PRT <213> Artificial Sequence		
65	<220> <223> recombinant TNF-alpha binder <400> 141		
70	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
75	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Tyr 20 25 30		
80	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 50 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 55 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 142
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 <400> 142
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 60 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 65 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

5 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

10 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

15 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

20 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

25 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

30 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

35 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

40 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

45 <210> 143
 <211> 224
 <212> PRT
 <213> Artificial Sequence

50 <220>
 <223> recombinant TNF-alpha binder

55 <400> 143

Glu Val Arg Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Ser
 20 25 30

65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

35 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

50 <210> 144
 <211> 214
 <212> PRT
 <213> Artificial Sequence

55 <220>
 <223> recombinant TNF-alpha binder
 <400> 144

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

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

70 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

75 Tyr Ala Ala Asn Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

	50		55		60											
5	Ser 65	Gly	Ser	Gly	Thr 70	Asp	Phe	Thr	Leu	Thr	Ile 75	Ser	Ser	Leu	Gln	Pro 80
10	Glu	Asp	Val	Ala	Thr 85	Tyr	Tyr	Cys	Gln	Arg 90	Tyr	Asn	Lys	Pro	Pro 95	Tyr
15	Thr	Phe	Gly	Gln 100	Gly	Thr	Lys	Val	Glu 105	Ile	Lys	Arg	Thr	Val 110	Ala	Ala
20	Pro	Ser	Val 115	Phe	Ile	Phe	Pro	Pro	Ser 120	Asp	Glu	Gln	Leu	Lys 125	Ser	Gly
25	Thr	Ala	Ser	Val 130	Val	Cys	Leu	Leu	Asn 135	Asn	Phe	Tyr	Pro	Arg	Glu	Ala 140
30	Lys 145	Val	Gln	Trp	Lys	Val 150	Asp	Asn	Ala	Leu	Gln 155	Ser	Gly	Asn	Ser	Gln 160
35	Glu	Ser	Val	Thr	Glu 165	Gln	Asp	Ser	Lys	Asp 170	Ser	Thr	Tyr	Ser	Leu 175	Ser
40	Ser	Thr	Leu	Thr 180	Leu	Ser	Lys	Ala	Asp 185	Tyr	Glu	Lys	His	Lys 190	Val	Tyr
45	Ala	Cys	Glu	Val 195	Thr	His	Gln	Gly	Leu 200	Ser	Ser	Pro	Val	Thr	Lys	Ser
50	Phe	Asn	Arg	Gly	Glu	Cys										
55	<210>	145														
60	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	145														
55	Glu 1	Val	Gln	Leu	Val 5	Glu	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15	Arg
60	Ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Asp 30	Asp	Phe
65	Ala	Met	His	Trp	Val 35	Arg	Gln	Ala	Pro 40	Gly	Lys	Gly	Leu	Glu 45	Trp	Val
	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
	50					55					60					

5	Glu 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ala 75	Lys	Asn	Ser	Leu	Tyr 80
10	Leu	Gln	Met	Asn 85	Ser	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
15	Ala	Lys	Val	Ser 100	Tyr	Leu	Ser	Thr	Ala 105	Ser	Ser	Leu	Asp	Tyr 110	Trp	Gly
20	Gln	Gly	Thr 115	Leu	Val	Thr	Val	Ser 120	Ser	Ala	Ser	Thr	Lys 125	Gly	Pro	Ser
25	Val	Phe 130	Pro	Leu	Ala	Pro	Ser 135	Ser	Lys	Ser	Thr	Ser 140	Gly	Gly	Thr	Ala
30	Ala 145	Leu	Gly	Cys	Leu 150	Val	Lys	Asp	Tyr	Phe 155	Pro	Glu	Pro	Val	Thr	Val 160
35	Ser	Trp	Asn	Ser	Gly 165	Ala	Leu	Thr	Ser	Gly 170	Val	His	Thr	Phe 175	Pro	Ala
40	Val	Leu	Gln	Ser 180	Ser	Gly	Leu	Tyr	Ser 185	Leu	Ser	Ser	Val	Val 190	Thr	Val
45	Pro	Ser	Ser 195	Ser	Leu	Gly	Thr	Gln 200	Thr	Tyr	Ile	Cys 205	Asn	Val	Asn	His
50	Lys 210	Pro	Ser	Asn	Thr	Lys	Val 215	Asp	Lys	Lys	Val	Glu 220	Pro	Lys	Ser	Cys
55	<210>	146														
60	<211>	214														
65	<212>	PRT														
70	<213>	Artificial Sequence														
75	<220>															
80	<223>	recombinant TNF-alpha binder														
85	<400>	146														
90	Asp 1	Ile	Gln	Met	Thr 5	Gln	Ser	Pro	Ser	Ser 10	Leu	Ser	Ala	Ser	Val 15	Gly
95	Asp	Arg	Val	Thr 20	Ile	Thr	Cys	Arg	Ala 25	Ser	Gln	Gly	Ile	Arg 30	Asn	Tyr
100	Leu	Ala	Trp 35	Tyr	Gln	Gln	Lys	Pro 40	Gly	Lys	Ala	Pro	Lys 45	Leu	Leu	Ile
105	Tyr 50	Ala	Ala	Asn	Trp	Leu	Gln 55	Ser	Gly	Val	Pro	Ser 60	Arg	Phe	Ser	Gly

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

5

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

10

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

15

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

20

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

25

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

30

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

35

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

40

Ala Cys Glu Ala Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

45

<210> 147
 <211> 224
 <212> PRT
 <213> Artificial Sequence

50

<220>
 <223> recombinant TNF-alpha binder

55

<400> 147

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

60

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

65

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

5 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

10 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

15 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

20 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

30 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 148
 <211> 214
 <212> PRT
 <213> Artificial Sequence

45 <220>
 <223> recombinant TNF-alpha binder

50 <400> 148

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

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

60 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

-188 -

65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

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

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

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

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 149
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> recombinant TNF-alpha binder

<400> 149

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80


```

5      Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85                                90                                95

10     Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
      100                                105                                110

15     Gln Gly Thr Leu Val Thr Val Ser
      115                                120

20     <210> 150
      <211> 107
      <212> PRT
      <213> Artificial Sequence

25     <220>
      <223> recombinant TNF-alpha binder

      <400> 150

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

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

35     Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
      35                                40                                45

40     Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
      50                                55                                60

45     Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
      65                                70                                75                                80

50     Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
      85                                90                                95

55     Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
      100                                105

      <210> 151
      <211> 224
      <212> PRT
      <213> Artificial Sequence

      <220>
      <223> recombinant TNF-alpha binder

60     <400> 151

65     Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
      1                                5                                10                                15

      Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe

```

	20	25	30
5	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
10	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
15	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
20	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
25	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
30	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		
35	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
40	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
45	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		
50	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 180 185 190		
55	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His 195 200 205		
60	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
65	<210> 152 <211> 214 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 152 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 25 30		

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

50 <210> 154
<211> 214
<212> PRT
<213> Artificial Sequence

55 <220>
<223> recombinant TNF-alpha binder
<400> 154

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

5 Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

10 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

15 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Ala Pro Tyr
 85 90 95

20 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

25 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

35 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

55 Phe Asn Arg Gly Glu Cys
 210

50 <210> 155
 <211> 224
 <212> PRT
 <213> Artificial Sequence

55 <220>
 <223> recombinant TNF-alpha binder

60 <400> 155

60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Ser
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45
 5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 50 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 55 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 60 <210> 156
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 <400> 156
 65 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

5 Tyr Ala Ala Trp Trp Leu Gln Ser Gly Met Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 10 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Lys Pro Pro Tyr
 85 90 95
 15 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 20 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 25 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 30 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 35 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 40 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 45 Phe Asn Arg Gly Glu Cys
 210
 <210> 157
 <211> 224
 <212> PRT
 50 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 55 <400> 157
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30
 65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

5

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

20

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

25

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

30

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

35

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

40

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

45

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

50

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

55

<210> 158
 <211> 214
 <212> PRT
 <213> Artificial Sequence

60

<220>
 <223> recombinant TNF-alpha binder

65

<400> 158

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

5 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

10 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Arg Pro Pro Tyr
 85 90 95

15 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

20 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

30 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

35 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

40 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

45 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

50 Phe Asn Arg Gly Glu Cys
 210

45 <210> 159
 <211> 224
 <212> PRT
 <213> Artificial Sequence

50 <220>
 <223> recombinant TNF-alpha binder
 <400> 159

55 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val

	50		55		60
5	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr	65	70	75	80
10	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys	85	90	95	
15	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly	100	105	110	
20	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser	115	120	125	
25	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala	130	135	140	
30	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val	145	150	155	160
35	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala	165	170	175	
40	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val	180	185	190	
45	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His	195	200	205	
50	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys	210	215	220	
55	<210> 160				
	<211> 214				
	<212> PRT				
	<213> Artificial Sequence				
	<220>				
	<223> recombinant TNF-alpha binder				
	<400> 160				
60	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5	10	15
65	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr	20	25	30	
	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35	40	45	
	Tyr Ala Ala Gly Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	50	55	60	

5 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 10 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 15 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 20 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 25 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 30 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 35 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 40 Phe Asn Arg Gly Glu Cys
 210
 <210> 161
 <211> 224
 45 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 50 <400> 161
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 55 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 60 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 65 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 5 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 10 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 15 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 20 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 30 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 35 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 40 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 162
 <211> 214
 <212> PRT
 45 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 50 <400> 162
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 55 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 60 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 65 Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

5 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95

10 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

15 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

25 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

30 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

35 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

40 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

45 Phe Asn Arg Gly Glu Cys
 210

50 <210> 163
 <211> 224
 <212> PRT
 <213> Artificial Sequence

55 <220>
 <223> recombinant TNF-alpha binder
 <400> 163

60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30

70 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

75 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

80 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr

	65		70		75		80									
5	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
10	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
15	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
20	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
	130						135					140				
25	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
30	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
35	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
40	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
		195						200					205			
45	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
50	<210>	164														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
55	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	164														
60	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
65	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
			20					25						30		
70	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35						40					45			
75	Tyr	Ala	Ala	Gly	Trp	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
80	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75				80	

	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr
5					85					90					95	
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
10	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
15	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
		130					135					140				
20	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
	145					150					155					160
25	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
					165					170					175	
30	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
				180					185					190		
35	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
			195					200					205			
40	Phe	Asn	Arg	Gly	Glu	Cys										
		210														
	<210>	165														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
45	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	165														
50	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5					10					15	
55	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Asn	Tyr
				20					25					30		
60	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
65	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
		50					55					60				
	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80

	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85					90					95	
5	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
10	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
15	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
20	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
25	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
30	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
35	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
40	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
	<210>	166														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
45	<400>	166														
50	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
55	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
				20					25					30		
60	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
65	Tyr	Ala	Ala	Gly	Trp	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
70	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Lys Pro Pro Tyr
 85 90 95

5 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

10 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

25 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

30 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

35 Phe Asn Arg Gly Glu Cys
 210

<210> 167
 <211> 224
 <212> PRT
 40 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

45 <400> 167

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

55 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

60 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

65 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

	85	90	95
5	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
10	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		
15	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
20	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
25	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		
30	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 180 185 190		
35	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His 195 200 205		
40	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
45	<210> 168 <211> 214 <212> PRT <213> Artificial Sequence		
50	<220> <223> recombinant TNF-alpha binder		
55	<400> 168		
60	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
65	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 25 30		
70	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
75	Tyr Ala Ala Gly Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
80	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
85	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr 85 90 95		

5 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 10 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 25 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30 Phe Asn Arg Gly Glu Cys
 210
 35 <210> 169
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 169
 45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Ser
 20 25 30
 55 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 5
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 10 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 15 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 20 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 25 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 30 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 35 <210> 170
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 170
 45 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 50 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 55 Tyr Ala Ala Gly Trp Leu Gln Ser Gly Met Pro Ser Arg Phe Ser Gly
 50 55 60
 60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Gln Pro Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

5 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30 Phe Asn Arg Gly Glu Cys
 210

35 <210> 171
 <211> 224
 <212> PRT
 <213> Artificial Sequence

40 <220>
 <223> recombinant TNF-alpha binder
 <400> 171

45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

50 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly

	100	105	110
5	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		
10	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
15	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
20	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		
25	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 180 185 190		
30	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His 195 200 205		
35	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
	<210> 172		
	<211> 214		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
40	<400> 172		
45	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
50	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 25 30		
55	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
60	Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr 85 90 95		
65	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

5

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

10

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

15

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

20

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

25

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

30

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

35

<210> 174
 <211> 214
 <212> PRT
 <213> Artificial Sequence

40

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

45

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

50

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

55

Tyr Ala Ala Gly Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

65

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

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

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

10 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

15 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

25 Phe Asn Arg Gly Glu Cys
210

30 <210> 175
<211> 224
<212> PRT
<213> Artificial Sequence

35 <220>
<223> recombinant TNF-alpha binder
<400> 175

40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

45 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

65 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser

115 120 125
 5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 10 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 20 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 25 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 30 <210> 176
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 35 <400> 176
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 50 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

10 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

15 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30 Phe Asn Arg Gly Glu Cys
 210

<210> 177
 <211> 224
 <212> PRT
 <213> Artificial Sequence

35 <220>
 <223> recombinant TNF-alpha binder
 <400> 177

40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

60 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

65 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 5
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 20 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 25
 <210> 178
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 30
 <220>
 <223> recombinant TNF-alpha binder
 <400> 178
 35 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Ala Pro Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

5 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

15 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20 Phe Asn Arg Gly Glu Cys
 210

25 <210> 179
 <211> 224
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 179

35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

50 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

55 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

60 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

65 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala

130 135 140

5 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

<210> 180
<211> 214
<212> PRT
<213> Artificial Sequence

30 <220>
<223> recombinant TNF-alpha binder

<400> 180

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

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

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

50 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Ala Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

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

5 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

15 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

20 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

25 Phe Asn Arg Gly Glu Cys
 210

30 <210> 181
 <211> 224
 <212> PRT
 <213> Artificial Sequence

35 <220>
 <223> recombinant TNF-alpha binder
 <400> 181

40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

45 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

50 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

70 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

75 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

80 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 10 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 15 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 20 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 182
 <211> 214
 <212> PRT
 25 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 30 <400> 182
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 35 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 40 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 45 Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Gln Ala Pro Tyr
 85 90 95
 55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 65 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20 Phe Asn Arg Gly Glu Cys
 210

25 <210> 183
 <211> 224
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 183

35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

65 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

60 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

65 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val

145 150 155 160
 5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 10 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 15 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 20 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 25 <210> 184
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 30 <220>
 <223> recombinant TNF-alpha binder
 <400> 184
 35 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 50 Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Lys Ala Pro Tyr
 85 90 95
 65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 70 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 75 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 80 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

 15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 20 Phe Asn Arg Gly Glu Cys
 210

 25 <210> 185
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 <220>
 30 <223> recombinant TNF-alpha binder

 <400> 185

 35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Ser
 20 25 30

 40 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 45 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 50 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

 55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 60 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

 65 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 5
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 20 <210> 186
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 25 <400> 186
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 40 Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 60 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

10 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

15 Phe Asn Arg Gly Glu Cys
 210

<210> 187
 <211> 224
 <212> PRT
 20 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder

25 <400> 187

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Phe
 20 25 30

35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

40 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

45 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

60 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

65 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala

[illegible]

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 10 Phe Asn Arg Gly Glu Cys
 210
 15 <210> 189
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 189
 25 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30
 35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 50 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 65 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

5

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

10

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

15

<210> 190
 <211> 214
 <212> PRT
 <213> Artificial Sequence

20

<220>
 <223> recombinant TNF-alpha binder
 <400> 190

25

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

30

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

35

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40

Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

45

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

50

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Gln Pro Pro Tyr
 85 90 95

55

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60

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

65

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

70

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

75

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


```

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
      180                      185                      190

5  Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
      195                      200                      205

10 Phe Asn Arg Gly Glu Cys
      210

15 <210> 191
    <211> 224
    <212> PRT
    <213> Artificial Sequence

20 <220>
    <223> recombinant TNF-alpha binder
    <400> 191

25 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
      1           5           10           15

30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
      20           25           30

35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35           40           45

40 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
      50           55           60

45 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
      65           70           75           80

50 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85           90           95

55 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
      100          105          110

60 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
      115          120          125

65 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
      130          135          140

70 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
      145          150          155          160

75 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
      165          170          175

80 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val

```

	180	185	190
5	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His 195 200 205		
10	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
15	<210> 192 <211> 214 <212> PRT <213> Artificial Sequence		
20	<220> <223> recombinant TNF-alpha binder		
25	<400> 192		
30	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
35	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 25 30		
40	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
45	Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
50	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
55	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr 85 90 95		
60	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
65	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
70	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
75	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
80	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
85	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		

	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
5			195					200					205			
	Phe	Asn	Arg	Gly	Glu	Cys										
		210														
10	<210>	193														
	<211>	224														
	<212>	PRT														
15	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	193														
20	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1			5						10					15	
25	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Gln	Tyr
			20						25					30		
30	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
35	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
		50					55					60				
40	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80
45	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
50	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
55	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
60	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
65	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
70	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
75	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		

5

10

```
<210> 194
<211> 214
<212> PRT
<213> Artificial Sequence
```

15

<220>
<223> recombinant TNF-alpha binder

<400> 194

20

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

25

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

30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

35

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

40

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Met Pro Pro Tyr
85 90 95

45

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

50

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

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

55

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

60

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

65

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

5 Phe Asn Arg Gly Glu Cys
210

10 <210> 195
<211> 224
<212> PRT
<213> Artificial Sequence

15 <220>
<223> recombinant TNF-alpha binder
<400> 195

20 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

25 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
20 25 30

30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

65 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His

	195	200	205
5	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
10	<210> 196 <211> 214 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 196		
20	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
25	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 25 30		
30	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
35	Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
40	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
45	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Lys Pro Pro Tyr 85 90 95		
50	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
55	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
60	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
65	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		

Phe Asn Arg Gly Glu Cys
 210
 5
 <210> 197
 <211> 224
 <212> PRT
 10 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 15 <400> 197
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 20 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Ser
 20 25 30
 25 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 30 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 35 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 40 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 45 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 50 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 55 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 60 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 65 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205

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

5

<210> 198
 <211> 214
 <212> PRT
 <213> Artificial Sequence

10

<220>
 <223> recombinant TNF-alpha binder
 <400> 198

15

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

20

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

25

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

30

Tyr Ala Ala Gly Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

35

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

40

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

45

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

50

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

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

55

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

60

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

65

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
210

5 <210> 199
 <211> 224
 <212> PRT
 <213> Artificial Sequence

10 <220>
 <223> recombinant TNF-alpha binder
 <400> 199

15 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

20 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Phe
 20 25 30

25 Ala Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

30 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

35 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

40 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

45 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

65 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys

	210	215	220
5	<210> 200 <211> 214 <212> PRT <213> Artificial Sequence		
10	<220> <223> recombinant TNF-alpha binder <400> 200		
15	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
20	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 25 30		
25	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
30	Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
35	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
40	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Ala Pro Tyr 85 90 95		
45	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
50	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
55	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
60	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
65	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
	Phe Asn Arg Gly Glu Cys 210		

5 <210> 201
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 10 <220>
 <223> recombinant TNF-alpha binder
 <400> 201

 15 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30

 20 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 25 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 30 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 35
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

 40 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 45 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

 50 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 55
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 202
 <211> 214
 <212> PRT
 5 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder
 10 <400> 202

 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 15 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 25 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95
 40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 50 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 70 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 75 Phe Asn Arg Gly Glu Cys
 210

<210> 203
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 5
 <220>
 <223> recombinant TNF-alpha binder
 <400> 203
 10 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 15 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 25 Tyr Ala Ala Ser Thr Leu Glu Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 35 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 45 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 50 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 55 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 60 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 65
 <210> 204

<211> 214
 <212> PRT
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder
 <400> 204

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

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

20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

25 Tyr Ala Ala Ser Thr Leu Gly Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

<210> 205
 <211> 214

<212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

<400> 205

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

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

20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

25 Tyr Ala Ala Ser Thr Leu Val Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

70 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

75 Phe Asn Arg Gly Glu Cys
 210

80 <210> 206
 <211> 214
 <212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

5

<400> 206

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

10

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

15

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

20

Tyr Ala Ala Ser Thr Leu Thr Arg Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

25

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

30

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

35

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

40

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

45

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

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

50

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

60

Phe Asn Arg Gly Glu Cys
210

65

<210> 207
<211> 214
<212> PRT
<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

5 <400> 207

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

10

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

15

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

20

Tyr Ala Ala Ser Thr Leu Arg Arg Gly Met Pro Ser Arg Phe Ser Gly
 50 55 60

25

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

30

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

35

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

40

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

45

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

50

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

60

Phe Asn Arg Gly Glu Cys
 210

<210> 208

<211> 214

65

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 208

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 20 Tyr Ala Ala Ser Thr Leu Ser Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 30 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 35 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 40 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 45 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 50 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 55 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 60
 <210> 209
 <211> 214
 <212> PRT
 65 <213> Artificial Sequence
 <220>

<223> recombinant TNF-alpha binder

<400> 209

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

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

15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

20 Arg Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

25 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
85 90 95

35 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

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

50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

55 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

60 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

65 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

70 Phe Asn Arg Gly Glu Cys
210

75 <210> 210
<211> 224
<212> PRT
<213> Artificial Sequence

80 <220>
<223> recombinant TNF-alpha binder

<400> 210

[illegible]

<400> 211

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15 Arg Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 45 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 60 <210> 212
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 65 <220>
 <223> recombinant TNF-alpha binder
 <400> 212

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 5
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 10
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15
 Val Ala Ala Ser Thr Leu Gln Ser Gly Met Pro Ser Arg Phe Ser Gly
 50 55 60
 20
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 25
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55
 Phe Asn Arg Gly Glu Cys
 210
 60
 <210> 213
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65
 <400> 213

	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
5	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
				20					25					30		
10	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
15	Trp	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
20	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75				80	
25	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asn	Arg	Ala	Pro	Tyr
					85					90					95	
30	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
35	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
40	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130						135					140				
45	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
	145					150					155					160
50	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
					165					170					175	
55	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
				180					185					190		
60	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
			195					200					205			
65	Phe	Asn	Arg	Gly	Glu	Cys										
	210															
	<210>	214														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	214														
	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg

-252 -

15

5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 10 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 45 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 50 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 55 <210> 216
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 216
 65 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asp Tyr
 20 25 30
 5
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 10 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 45 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 50 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 55 <210> 217
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 217
 65 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

5 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

10 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

45 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 218
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

65 <400> 218

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

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr

	20	25	30
5	Leu Ala Trp Tyr Gln Gln Lys	Pro Gly Lys Ala Pro Lys	Leu Leu Ile
	35	40	45
10	Tyr Ala Ala Gly Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly		
	50	55	60
15	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro		
	65	70	75 80
20	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Lys Pro Pro Tyr		
	85	90	95
25	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala		
	100	105	110
30	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly		
	115	120	125
35	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala		
	130	135	140
40	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln		
	145	150	155 160
45	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser		
	165	170	175
50	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr		
	180	185	190
55	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser		
	195	200	205
60	Phe Asn Arg Gly Glu Cys		
	210		
65	<210> 219		
	<211> 224		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
70	<400> 219		
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg		
	1	5	10 15
75	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr		
	20	25	30

5	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35						40					45			
	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
		50					55					60				
10	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
		65				70					75					80
15	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
20	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
25	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
30	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
35	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
		145				150					155					160
40	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
45	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
50	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
55	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
	<210>	220														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	220														
60	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
					5					10					15	
65	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
				20					25					30		

	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35						40					45			
5																
	Tyr	Ala	Ala	Asn	Trp	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
10																
	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
15																
	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr
					85					90					95	
20																
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
25																
	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
30																
	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
		130					135					140				
35																
	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
	145					150					155					160
40																
	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
					165					170					175	
45																
	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
				180					185					190		
50																
	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
			195					200					205			
55																
	Phe	Asn	Arg	Gly	Glu	Cys										
		210														
60																
	<210>	221														
	<211>	224														
	<212>	PRT														

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

50 <210> 222
<211> 214
<212> PRT
<213> Artificial Sequence

55 <220>
<223> recombinant TNF-alpha binder
<400> 222

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

	35	40	45
5	Tyr Ala Ala Asn Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
10	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
15	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr 85 90 95		
20	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
25	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
30	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
35	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
40	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
45	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
50	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
55	Phe Asn Arg Gly Glu Cys 210		
60	<210> 223 <211> 224 <212> PRT <213> Artificial Sequence		
65	<220> <223> recombinant TNF-alpha binder		
	<400> 223		
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe 20 25 30		
	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

60 <210> 224
 <211> 214
 <212> PRT
 <213> Artificial Sequence

65 <220>
 <223> recombinant TNF-alpha binder

70 <400> 224

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

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

85 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

5

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

10

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

15

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

20

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

25

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

30

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

35

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

40

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

45

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

50

Phe Asn Arg Gly Glu Cys
 210

55

<210> 225
 <211> 224
 <212> PRT
 <213> Artificial Sequence

60

<220>
 <223> recombinant TNF-alpha binder

65

<400> 225

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

20 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

25 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

30 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

35 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

45 <210> 226
 <211> 214
 <212> PRT
 <213> Artificial Sequence

50 <220>
 <223> recombinant TNF-alpha binder
 <400> 226

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

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

65 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Asn Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

	50	55	60
5	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
10	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr 85 90 95		
15	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
20	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
25	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
30	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
35	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
40	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
45	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
50	Phe Asn Arg Gly Glu Cys 210		
55	<210> 227 <211> 224 <212> PRT <213> Artificial Sequence		
60	<220> <223> recombinant TNF-alpha binder <400> 227		
65	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe 20 25 30		
	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		

5	Glu 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ala 75	Lys	Asn	Ser	Leu	Tyr 80
	Leu	Gln	Met	Asn 85	Ser	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
10	Ala	Lys	Val	Ser 100	Tyr	Leu	Ser	Thr	Ala 105	Ser	Ser	Leu	Asp	Tyr 110	Trp	Gly
15	Gln	Gly	Thr 115	Leu	Val	Thr	Val	Ser 120	Ser	Ala	Ser	Thr	Lys 125	Gly	Pro	Ser
20	Val 130	Phe	Pro	Leu	Ala	Pro	Ser 135	Ser	Lys	Ser	Thr	Ser 140	Gly	Gly	Thr	Ala
25	Ala 145	Leu	Gly	Cys	Leu	Val 150	Lys	Asp	Tyr	Phe	Pro 155	Glu	Pro	Val	Thr	Val 160
	Ser	Trp	Asn	Ser	Gly 165	Ala	Leu	Thr	Ser	Gly 170	Val	His	Thr	Phe	Pro 175	Ala
30	Val	Leu	Gln	Ser 180	Ser	Gly	Leu	Tyr	Ser 185	Leu	Ser	Ser	Val	Val 190	Thr	Val
35	Pro	Ser	Ser 195	Ser	Leu	Gly	Thr	Gln 200	Thr	Tyr	Ile	Cys	Asn 205	Val	Asn	His
40	Lys 210	Pro	Ser	Asn	Thr	Lys	Val 215	Asp	Lys	Lys	Val	Glu 220	Pro	Lys	Ser	Cys
45	<210>	228														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
50	<223>	recombinant TNF-alpha binder														
	<400>	228														
55	Asp 1	Ile	Gln	Met 5	Thr	Gln	Ser	Pro	Ser 10	Ser	Leu	Ser	Ala	Ser 15	Val	Gly
	Asp	Arg	Val	Thr 20	Ile	Thr	Cys	Arg	Ala 25	Ser	Gln	Gly	Ile	Arg 30	Asn	Tyr
60	Leu	Ala	Trp	Tyr 35	Gln	Gln	Lys	Pro 40	Gly	Lys	Ala	Pro	Lys 45	Leu	Leu	Ile
65	Tyr 50	Ala	Ala	Ser	Thr	Leu	Gln 55	Ser	Gly	Val	Pro	Ser 60	Arg	Phe	Ser	Gly

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 5 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 10 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 15 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 20 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 25 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 30 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 35 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 40 Phe Asn Arg Gly Glu Cys
 210
 <210> 229
 <211> 224
 <212> PRT
 45 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 50 <400> 229
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 55 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30
 60 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 65 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

5 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

10 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

15 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

20 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

30 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

40 <210> 230
 <211> 214
 <212> PRT
 <213> Artificial Sequence

45 <220>
 <223> recombinant TNF-alpha binder

50 <400> 230

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

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

60 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

	65	70	75	80
5	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr	85	90	95
10	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105	110
15	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120	125
20	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135	140
25	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150	155
30	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170	175
35	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185	190
40	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	200	205
45	Phe Asn Arg Gly Glu Cys	210		
50	<210> 231 <211> 224 <212> PRT <213> Artificial Sequence			
55	<220> <223> recombinant TNF-alpha binder <400> 231			
60	Glu Val Gln Leu Ile Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg	1	5	10
65	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr	20	25	30
70	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val	35	40	45
75	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val	50	55	60
80	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr	65	70	75

5 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 10 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 15 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 20 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 30 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 35 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 40 <210> 232
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 45 <220>
 <223> recombinant TNF-alpha binder
 <400> 232
 50 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 60 Tyr Ala Ala Trp Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asn	Met	Pro	Pro	Tyr
					85					90					95	
5	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
			100						105					110		
10	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
15	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
		130					135					140				
20	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
	145					150					155					160
25	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
					165					170					175	
30	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
				180					185					190		
35	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
			195					200					205			
40	Phe	Asn	Arg	Gly	Glu	Cys										
		210														
	<210>	233														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
45	<400>	233														
50	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5					10					15	
55	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Gln	Phe
				20					25					30		
60	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
65	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
		50					55					60				
70	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

5 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

10 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

15 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

20 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

30 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 234
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

45 <400> 234

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

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

55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

60 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Lys Ala Pro Tyr

	85	90	95
5	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
10	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
15	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
20	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
25	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
30	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
35	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
40	Phe Asn Arg Gly Glu Cys 210		
45	<210> 235 <211> 224 <212> PRT <213> Artificial Sequence		
50	<220> <223> recombinant TNF-alpha binder		
55	<400> 235		
60	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
65	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Tyr 20 25 30		
70	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
75	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
80	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
85	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		

5	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly	
				100					105					110			
	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	
			115					120					125				
10	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	
		130					135					140					
15	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	
	145					150					155					160	
20	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	
					165					170					175		
25	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	
				180					185					190			
30	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	
			195					200					205				
35	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	
		210					215					220					
	<210>	236															
	<211>	214															
	<212>	PRT															
	<213>	Artificial Sequence															
40	<220>																
	<223>	recombinant TNF-alpha binder															
	<400>	236															
45	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	
	1				5					10					15		
50	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr	
				20					25					30			
55	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	
			35					40					45				
60	Tyr	Ala	Ala	Gly	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	
		50					55					60					
65	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	
	65					70					75					80	
65	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr	
					85					90						95	

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 5
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 10 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30 Phe Asn Arg Gly Glu Cys
 210
 35 <210> 237
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 237
 45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 55 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

10 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

15 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

35 <210> 238
<211> 214
<212> PRT
<213> Artificial Sequence

40 <220>
<223> recombinant TNF-alpha binder
<400> 238

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

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

50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

55 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Met Pro Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala

	100	105	110
5	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
10	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
15	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
20	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
25	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
30	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
35	Phe Asn Arg Gly Glu Cys 210		
40	<210> 239 <211> 224 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 239		
45	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
50	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe 20 25 30		
55	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
60	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
65	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		

5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 10 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 15 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 25 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 30 <210> 240
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 35 <220>
 <223> recombinant TNF-alpha binder
 <400> 240
 40 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 45 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Gly Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

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

5

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

10

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

15

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

20

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30

Phe Asn Arg Gly Glu Cys
 210

35

<210> 241
 <211> 224
 <212> PRT
 <213> Artificial Sequence

40

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

45

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Asp Gln Tyr
 20 25 30

50

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

70

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

10 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

15 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

35 <210> 242
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 <400> 242

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

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

50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

55 Tyr Ala Ala Trp Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Ala Pro Tyr
 85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

	115	120	125
5	Thr Ala Ser Val Val Cys 130	Leu Leu Asn Asn Phe 135	Tyr Pro Arg Glu Ala 140
10	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
15	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
20	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
25	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
30	Phe Asn Arg Gly Glu Cys 210		
35	<210> 243 <211> 224 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 243		
40	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
45	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe 20 25 30		
50	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
55	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
60	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
65	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		

5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 20 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 25 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 244
 <211> 214
 <212> PRT
 30 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 35 <400> 244
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 50 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Gln Ala Pro Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

5

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

10

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

15

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

20

Ala Cys Glu Val Ala His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

25

Phe Asn Arg Gly Glu Cys
 210

<210> 245
 <211> 224
 <212> PRT
 <213> Artificial Sequence

30

<220>
 <223> recombinant TNF-alpha binder

35

<400> 245

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

40

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

45

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

50

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

55

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

60

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

65

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

5 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

25 <210> 246
 <211> 214
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 246

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

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

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

50 Tyr Ala Ala Asn Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala

	130	135	140
5	Lys Val Gln Trp	Lys Val Asp Asn Ala Leu	Gln Ser Gly Asn Ser Gln
	145	150	155 160
10	Glu Ser Val Thr	Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	
		165 170	175
15	Ser Thr Leu Thr	Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	
		180 185	190
20	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser		
		195 200	205
25	Phe Asn Arg Gly Glu Cys		
	210		
30	<210> 247		
	<211> 224		
	<212> PRT		
	<213> Artificial Sequence		
35	<220>		
	<223> recombinant TNF-alpha binder		
	<400> 247		
40	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg		
	1 5 10 15		
45	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe		
		20 25 30	
50	Ala Met His Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val		
		35 40 45	
55	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val		
		50 55 60	
60	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr		
		65 70 75 80	
65	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys		
		85 90 95	
70	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly		
		100 105 110	
75	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser		
		115 120 125	
80	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala		
		130 135 140	

5	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
10	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
15	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
20	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
	<210>	248														
25	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
30	<223>	recombinant TNF-alpha binder														
	<400>	248														
35	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
40	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
				20					25					30		
45	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
50	Tyr	Ala	Ala	Asn	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
55	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
60	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Ala	Pro	Tyr
					85					90					95	
65	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
70	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
75	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130						135					140				

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5

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

10

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20

Phe Asn Arg Gly Glu Cys
 210

<210> 249
 <211> 224
 <212> PRT
 <213> Artificial Sequence

25

<220>
 <223> recombinant TNF-alpha binder

30

<400> 249

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

35

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

40

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

50

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

55

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

60

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

65

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

10 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 250
 <211> 214
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

30 <400> 250

35 Asp Ile Gln Met Ser Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

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

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

50 Tyr Ala Ala Asn Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

70 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

80 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln

	145		150		155		160
5	Glu Ser Val Thr	Glu Gln Asp	Ser Lys Asp	Ser Thr Tyr	Ser Leu Ser		
		165		170		175	
10	Ser Thr Leu Thr	Leu Ser Lys Ala	Asp Tyr Glu Lys	His Lys Val Tyr			
		180		185		190	
15	Ala Cys Glu Val	Thr His Gln Gly	Leu Ser Ser Pro	Val Thr Lys Ser			
		195		200		205	
20	Phe Asn Arg Gly	Glu Cys					
		210					
25	<210>	251					
	<211>	224					
	<212>	PRT					
	<213>	Artificial Sequence					
30	<220>						
	<223>	recombinant TNF-alpha binder					
	<400>	251					
35	Glu Val Gln Leu	Val Glu Ser Gly	Gly Gly Glu Leu	Val Gln Pro Gly	Arg		
	1	5	10	15			
40	Ser Leu Arg Leu	Ser Cys Ala Ala	Ser Gly Phe Thr	Phe Asp His Phe			
		20	25	30			
45	Ala Met His Trp	Val Arg Gln Ala	Pro Gly Lys Gly	Leu Glu Trp Val			
		35	40	45			
50	Ser Ala Ile Thr	Trp Asn Ser Gly	His Ile Asp Tyr	Ala Asp Ser Val			
	50	55	60				
55	Glu Gly Arg Phe	Thr Ile Ser Arg	Asp Asn Ala Lys	Asn Ser Leu Tyr			
	65	70	75	80			
60	Leu Gln Met Asn	Ser Leu Arg Ala	Glu Asp Thr Ala	Val Tyr Tyr Cys			
		85	90	95			
65	Ala Lys Val Ser	Tyr Leu Ser Thr	Ala Ser Ser Leu	Asp Tyr Trp Gly			
		100	105	110			
70	Gln Gly Thr Leu	Val Thr Val Ser	Ser Ala Ser Thr	Lys Gly Pro Ser			
		115	120	125			
75	Val Phe Pro Leu	Ala Pro Ser Ser	Lys Ser Thr Ser	Gly Gly Thr Ala			
		130	135	140			
80	Ala Leu Gly Cys	Leu Val Lys Asp	Tyr Phe Pro Glu	Pro Val Thr Val			
	145	150	155	160			

5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 20 <210> 252
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 25 <220>
 <223> recombinant TNF-alpha binder
 <400> 252
 30 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 40 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 60 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 5
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 10
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 15
 Phe Asn Arg Gly Glu Cys
 210
 <210> 253
 <211> 224
 20
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 25
 <400> 253
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 30
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Arg
 20 25 30
 35
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 40
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 45
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 50
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 55
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 60
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 65
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 65
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

5 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 254
 <211> 214
 <212> PRT
 20 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder

25 <400> 254
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

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

35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40 Tyr Ala Ala Asn Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Arg Ala Pro Tyr
 85 90 95

50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

65 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser

	165	170	175
5	Ser Thr Leu Thr 180	Leu Ser Lys Ala Asp Tyr Glu Lys His 185	Lys Val Tyr 190
10	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
15	Phe Asn Arg Gly Glu Cys 210		
20	<210> 255 <211> 224 <212> PRT <213> Artificial Sequence		
25	<220> <223> recombinant TNF-alpha binder <400> 255		
30	Lys Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
35	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe 20 25 30		
40	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
45	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
50	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
55	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
60	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
65	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		
	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		

5 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 10 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 15 <210> 256
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 256
 25 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Gln
 65 70 75 80
 45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Lys Pro Pro Tyr
 85 90 95
 50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 60 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 65 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 5
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 10 Phe Asn Arg Gly Glu Cys
 210
 15 <210> 257
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 257
 25 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 50 Ala Lys Val Ser Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 60 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 65 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

15 <210> 258
 <211> 214
 <212> PRT
 <213> Artificial Sequence

20 <220>
 <223> recombinant TNF-alpha binder
 <400> 258

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

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

35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

70 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

75 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

80 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr

180 185 190
 5 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 10 Phe Asn Arg Gly Glu Cys
 210

 15 <210> 259
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder

 20 <400> 259

 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 25 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

 30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 40 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 45 Ala Lys Val Lys Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

 50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

 60 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

 65 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

5	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
								200					205			
	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
10	<210>	260														
	<211>	214														
	<212>	PRT														
15	<213>	Artificial	Sequence													
	<220>															
	<223>	recombinant	TNF-alpha	binder												
	<400>	260														
20	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
25	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
				20					25					30		
30	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
35	Tyr	Ala	Ala	Ser	Ser	Thr	Ile	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
40	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
45	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr
					85					90				95		
50	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
55	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
60	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130						135					140				
65	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
	145					150					155					160
70	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
					165					170					175	
75	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
				180					185					190		

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

5

Phe Asn Arg Gly Glu Cys
 210

10

<210> 261
 <211> 224
 <212> PRT
 <213> Artificial Sequence

15

<220>
 <223> recombinant TNF-alpha binder
 <400> 261

20

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

25

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

35

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

40

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

45

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50

Ala Lys Val Ser Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

55

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

60

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

65

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

70

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

75

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

10 <210> 262
 <211> 214
 <212> PRT
 <213> Artificial Sequence

15 <220>
 <223> recombinant TNF-alpha binder
 <400> 262

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

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

30 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

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

40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Gln Pro Pro Tyr
 85 90 95

50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

70 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

75 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

80 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser

195 200 205
 5 Phe Asn Arg Gly Glu Cys
 210
 10 <210> 263
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 15 <220>
 <223> recombinant TNF-alpha binder
 <400> 263
 20 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 25 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 45 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 65 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205

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

 10 <210> 264
 <211> 214
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder

 15 <400> 264

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

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

 25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

 30 Tyr Ala Ala Ser Ser Thr Ile Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

 35 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

 40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

 45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

 55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

 60 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

 65 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
210

5

<210> 265
<211> 120
<212> PRT
<213> Artificial Sequence

10

<220>
<223> recombinant TNF-alpha binder

15

<400> 265

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

20

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
20 25 30

25

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

30

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

35

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

40

Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

45

Gln Gly Thr Leu Val Thr Val Ser
115 120

50

<210> 266
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> recombinant TNF-alpha binder

55

<400> 266

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

60

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

65

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

5 Tyr Ala Ala Ser Ser Thr Ile Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 10 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 15 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105
 20 <210> 267
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 25 <220>
 <223> recombinant TNF-alpha binder
 <400> 267
 30 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 40 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 45 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 50 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Lys Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 60 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 65 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 5
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 20 <210> 268
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 25 <400> 268
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Leu Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 40 Tyr Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 60 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

10 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

15 Phe Asn Arg Gly Glu Cys
 210

20 <210> 269
 <211> 224
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

30 <400> 269

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

35 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

40 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

45 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

50 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

55 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

60 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

65 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

70 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

75 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

80 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala

165 170 175
 5 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 270
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 270
 25 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 40 Tyr Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 10 Phe Asn Arg Gly Glu Cys
 210
 15 <210> 271
 <211> 120
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 271
 25 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 50 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 55 Gln Gly Thr Leu Val Thr Val Ser
 115 120
 60 <210> 272
 <211> 107
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 272
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

	1	5	10	15
5	Asp Arg Val Thr	Ile Thr Cys Arg Ala	Ser Gln Arg Leu Arg	Asn Tyr
	20	25	30	
10	Leu Ala Trp Tyr	Gln Gln Lys Pro Gly	Lys Ala Pro Lys	Leu Leu Ile
	35	40	45	
15	Tyr Ala Ala Ser	Ser Thr Ile Ser Gly	Val Pro Ser Arg	Phe Ser Gly
	50	55	60	
20	Ser Gly Ser Gly	Thr Asp Phe Thr	Leu Thr Ile Ser	Ser Ser Leu Gln Pro
	65	70	75	80
25	Glu Asp Val Ala	Thr Tyr Tyr Cys Gln	Arg Tyr Ile Gln	Pro Pro Tyr
	85	90	95	
30	Thr Phe Gly Gln	Gly Thr Lys Val Glu	Ile Lys	
	100	105		
35	<210> 273			
	<211> 224			
	<212> PRT			
	<213> Artificial Sequence			
	<220>			
	<223> recombinant TNF-alpha binder			
	<400> 273			
40	Glu Val Gln Leu	Val Glu Ser Gly Gly	Gly Leu Val Gln	Pro Gly Arg
	1	5	10	15
45	Ser Leu Arg Leu	Ser Cys Ala Ala	Ser Gly Phe Thr	Phe Asp Gln Phe
	20	25	30	
50	Ala Met His Trp	Val Arg Gln Ala	Pro Gly Lys Gly	Leu Glu Trp Val
	35	40	45	
55	Ser Ala Ile Thr	Trp Asn Ser Gly	His Ile Asp Tyr	Ala Asp Ser Val
	50	55	60	
60	Glu Gly Arg Phe	Thr Ile Ser Arg	Asp Asn Ala Lys	Asn Ser Leu Tyr
	65	70	75	80
65	Leu Gln Met Asn	Ser Leu Arg Ala	Glu Asp Thr Ala	Val Tyr Tyr Cys
	85	90	95	
70	Ala Lys Val Ser	Tyr Leu Ser Thr	Ala Ser Ser Leu	Asp Tyr Trp Gly
	100	105	110	
75	Gln Gly Thr Leu	Val Thr Val Ser	Ser Ala Ser Thr	Lys Gly Pro Ser
	115	120	125	

5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 20 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 25 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 274
 <211> 214
 <212> PRT
 30 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 35 <400> 274
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 50 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 5
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 15 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 20 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 25
 <210> 275
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 30
 <220>
 <223> recombinant TNF-alpha binder
 <400> 275
 35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 55 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 60 Ala Lys Val Ser Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 65 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

5 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

25 <210> 276
 <211> 214
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 276

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

40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Arg Asn Tyr
 20 25 30

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

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

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala

130 135 140
 5 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

 10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

 15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 20 Phe Asn Arg Gly Glu Cys
 210

 25 <210> 277
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 30 <220>
 <223> recombinant TNF-alpha binder

 <400> 277

 35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

 40 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 45 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 50 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 55 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

 60 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 65 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

5	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145						150				155					160
	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
10	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
15	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
20	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
	<210>	278														
25	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
30	<223>	recombinant TNF-alpha binder														
	<400>	278														
35	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
				20					25					30		
40	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
45	Tyr	Ala	Ala	Ser	Trp	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
50	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr
55					85					90					95	
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
60	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
65	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130						135					140				

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5

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

10

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20

Phe Asn Arg Gly Glu Cys
 210

<210> 279
 <211> 224
 <212> PRT
 25 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder

30

<400> 279
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

35

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

40

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

50

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

55

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

60

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

65

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

10 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

20 <210> 280
 <211> 214
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

30 <400> 280

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

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

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln

	145		150		155		160
5	Glu Ser Val Thr	Glu Gln Asp Ser Lys	Asp Ser Thr Tyr Ser	Leu Ser			
		165	170	175			
10	Ser Thr Leu Thr	Leu Ser Lys Ala Asp	Tyr Glu Lys His	Lys Val Tyr			
		180	185	190			
15	Ala Cys Glu Val	Thr His Gln Gly	Leu Ser Ser Pro	Val Thr Lys Ser			
		195	200	205			
20	Phe Asn Arg Gly	Glu Cys					
		210					
25	<210>	281					
	<211>	224					
	<212>	PRT					
	<213>	Artificial Sequence					
30	<220>						
	<223>	recombinant TNF-alpha binder					
	<400>	281					
35	Glu Val Gln Leu	Val Glu Ser Gly	Gly Gly Leu Val	Gln Pro Gly Arg			
	1	5	10	15			
40	Ser Leu Arg Leu	Ser Cys Ala Ala	Ser Gly Phe Thr	Phe Asp Gln Phe			
		20	25	30			
45	Ala Met His Trp	Val Arg Gln Ala	Pro Gly Lys Gly	Leu Glu Trp Val			
		35	40	45			
50	Ser Ala Ile Thr	Trp Asn Ser Gly	His Ile Asp Tyr	Ala Asp Ser Val			
		50	55	60			
55	Glu Gly Arg Phe	Thr Ile Ser Arg	Asp Asn Ala Lys	Asn Ser Leu Tyr			
		65	70	75	80		
60	Leu Gln Met Asn	Ser Leu Arg Ala	Glu Asp Thr Ala	Val Tyr Tyr Cys			
		85	90	95			
65	Ala Lys Val Ser	Tyr Leu Pro Thr	Ala Ser Ser Leu	Asp Tyr Trp Gly			
		100	105	110			
70	Gln Gly Thr Leu	Val Thr Val Ser	Ser Ala Ser Thr	Lys Gly Pro Ser			
		115	120	125			
75	Val Phe Pro Leu	Ala Pro Ser Ser	Lys Ser Thr Ser	Gly Gly Thr Ala			
		130	135	140			
80	Ala Leu Gly Cys	Leu Val Lys Asp	Tyr Phe Pro Glu	Pro Val Thr Val			
		145	150	155	160		

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 5
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 20
 <210> 282
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 25
 <220>
 <223> recombinant TNF-alpha binder
 <400> 282
 30
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 35
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Arg Asn Tyr
 20 25 30
 40
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 45
 Tyr Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 50
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 55
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 60
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 70
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 75
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

10 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

15 Phe Asn Arg Gly Glu Cys
 210

20 <210> 283
 <211> 224
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder
 <400> 283

30 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

40 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

45 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50 Ala Lys Val Lys Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

60 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

65 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

5 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 284
 <211> 214
 <212> PRT
 20 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder

25 <400> 284

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

30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Met Gly Leu Arg Asn Tyr
 20 25 30

35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40 Tyr Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Gln Pro Pro Tyr
 85 90 95

50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser

165 170 175
 5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 10 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 15 Phe Asn Arg Gly Glu Cys
 210
 20 <210> 285
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 25 <220>
 <223> recombinant TNF-alpha binder
 30 <400> 285
 35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 65 Ala Lys Val Lys Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 70 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 75 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 80 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 85 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

5 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 10 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 15 <210> 286
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 286
 25 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Leu Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Ser Leu Ile Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 45 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 50 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 60 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 65 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

5 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

10 Phe Asn Arg Gly Glu Cys
 210

15 <210> 287
 <211> 224
 <212> PRT
 <213> Artificial Sequence

20 <220>
 <223> recombinant TNF-alpha binder
 <400> 287

25 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

40 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50 Ala Lys Val Lys Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

65 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

15 <210> 288
 <211> 214
 <212> PRT
 <213> Artificial Sequence

20 <220>
 <223> recombinant TNF-alpha binder
 <400> 288

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

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

35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Gln Pro Phe Tyr
 85 90 95

55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

70 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

75 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

80 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr

	180	185	190
5	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
10	Phe Asn Arg Gly Glu Cys 210		
15	<210> 289 <211> 224 <212> PRT <213> Artificial Sequence		
20	<220> <223> recombinant TNF-alpha binder		
25	<400> 289		
30	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
35	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe 20 25 30		
40	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
45	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
50	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
55	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
60	Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
65	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		
70	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
75	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
80	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		
85	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 180 185 190		

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

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

 15 <210> 290
 <211> 214
 <212> PRT
 <213> Artificial Sequence

 20 <220>
 <223> recombinant TNF-alpha binder

 <400> 290
 25 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

 30 Asp Arg Val Thr Ile Thr Cys Thr Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30

 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

 Tyr Ala Ala Ser Ser Thr Gln Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 40 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 45 Thr Phe Gly Gln Gly Thr Lys Ile Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

 50 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

 60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

5 Phe Asn Arg Gly Glu Cys
 210

10 <210> 291
 <211> 120
 <212> PRT
 <213> Artificial Sequence

15 <220>
 <223> recombinant TNF-alpha binder
 <400> 291

20 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

25 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

55 Gln Gly Thr Leu Val Thr Val Ser
 115 120

60 <210> 292
 <211> 107
 <212> PRT
 <213> Artificial Sequence

65 <220>
 <223> recombinant TNF-alpha binder
 <400> 292

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

65 Asp Arg Val Thr Ile Thr Cys Thr Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30

5	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35						40					45			
	Tyr	Ala	Ala	Ser	Ser	Thr	Gln	Arg	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
10	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
15	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr
					85					90					95	
20	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Ile	Glu	Ile	Lys					
				100					105							
	<210>	293														
25	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
30	<223>	recombinant TNF-alpha binder														
	<400>	293														
35	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5					10					15	
	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Gln	Phe
				20					25					30		
40	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
45	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
		50					55					60				
50	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80
	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
55					85					90					95	
	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
60	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
65	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

5

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

10

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

15

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

20

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

25

<210> 294
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder

30

<400> 294

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

35

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30

40

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

45

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

50

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60

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

65

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20 Phe Asn Arg Gly Glu Cys
 210

25 <210> 295
 <211> 120
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 295

35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30

45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

65 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

60 Gln Gly Thr Leu Val Thr Val Ser
 115 120

65 <210> 296
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 296

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 20 Tyr Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 30 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105
 35 <210> 297
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 297
 45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 50 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 55 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

10 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

15 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

35 <210> 298
<211> 214
<212> PRT
<213> Artificial Sequence

40 <220>
<223> recombinant TNF-alpha binder
<400> 298

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

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

50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala

	100	105	110
5	Pro Ser Val Phe Ile Phe Pro	Pro Ser Asp Glu Gln Leu Lys Ser Gly	
	115	120	125
10	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala		
	130	135	140
15	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln		
	145	150	155
20	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser		
	165	170	175
25	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr		
	180	185	190
30	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser		
	195	200	205
35	Phe Asn Arg Gly Glu Cys		
	210		
40	<210> 299		
	<211> 224		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
45	<400> 299		
50	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg		
	1	5	10
55	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe		
	20	25	30
60	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val		
	35	40	45
65	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val		
	50	55	60
70	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr		
	65	70	75
75	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys		
	85	90	95
80	Ala Lys Val Ser Tyr Leu Pro Thr Ala Ser Ser Leu Asp Tyr Trp Gly		
	100	105	110

5
10
15
20
25
30
35
40
45
50
55
60
65

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

<210> 300
<211> 214
<212> PRT
<213> Artificial Sequence

<220>
<223> recombinant TNF-alpha binder

<400> 300

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Trp Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

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

5

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

10

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

15

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

20

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30

Phe Asn Arg Gly Glu Cys
 210

35

<210> 301
 <211> 224
 <212> PRT
 <213> Artificial Sequence

40

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

45

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe
 20 25 30

50

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

65

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

10 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

15 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

30 <210> 302
 <211> 214
 <212> PRT
 <213> Artificial Sequence

35 <220>
 <223> recombinant TNF-alpha binder
 <400> 302

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

45 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

50 Gly Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

	115	120	125
5	Thr Ala Ser Val Val Cys 130	Leu Leu Asn Asn Phe 135	Tyr Pro Arg Glu Ala 140
10	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
15	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
20	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
25	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
30	Phe Asn Arg Gly Glu Cys 210		
35	<210> 303 <211> 120 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 303		
40	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
45	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe 20 25 30		
50	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
55	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
60	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
65	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
	Gln Gly Thr Leu Val Thr Val Ser 115 120		

5 <210> 304
 <211> 107
 <212> PRT
 <213> Artificial Sequence

 10 <220>
 <223> recombinant TNF-alpha binder
 <400> 304

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

 20 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30

 25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

 30 Gly Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

 35 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

 40 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

 45 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

 50 <210> 305
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 55 <220>
 <223> recombinant TNF-alpha binder
 <400> 305

 60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Pro Gly Arg
 1 5 10 15

 65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe
 20 25 30

 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr

	65		70		75		80									
5	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
10	Ala	Lys	Val	Ser	Tyr	Leu	Pro	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
15	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
20	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
	130						135					140				
25	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145				150						155					160
30	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
				165					170						175	
35	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
			180						185					190		
40	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
		195						200					205			
45	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
50	<210>	306														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
55	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	306														
60	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
65	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Arg	Leu	Arg	Asn	Tyr
			20					25					30			
70	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35						40					45			
75	Arg	Ala	Ala	Ser	Ser	Thr	Ile	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55				60					
80	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65				70					75					80	

5	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr	
					85					90					95		
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala	
				100					105					110			
10	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	
			115					120					125				
15	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	
		130					135					140					
20	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	
	145				150						155					160	
25	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser	
					165					170					175		
30	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr	
				180					185					190			
35	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser	
			195					200					205				
40	Phe	Asn	Arg	Gly	Glu	Cys											
		210															
	<210>	307															
	<211>	224															
	<212>	PRT															
	<213>	Artificial Sequence															
45	<220>																
	<223>	recombinant TNF-alpha binder															
	<400>	307															
50	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg	
	1			5						10					15		
55	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Gln	Phe	
				20					25					30			
60	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
			35					40					45				
65	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val	
		50					55					60					
	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr	
	65					70					75					80	

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

5

Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

10

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

15

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

20

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

25

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

30

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

35

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

40

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

<210> 308
 <211> 214
 <212> PRT
 <213> Artificial Sequence

45

<220>
 <223> recombinant TNF-alpha binder

50

<400> 308

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

55

Asp Arg Val Thr Ile Thr Cys Thr Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30

60

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

65

Gly Ala Ala Ser Ser Thr Gln Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

5 Thr Phe Gly Gln Gly Thr Lys Ile Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

10 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

25 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

30 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

35 Phe Asn Arg Gly Glu Cys
 210

<210> 309
 <211> 120
 <212> PRT
 40 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

45 <400> 309

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe
 20 25 30

55 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

60 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

65 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

	85	90	95
5	Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly	100	105 110
10	Gln Gly Thr Leu Val Thr Val Ser	115	120
15	<210> 310 <211> 107 <212> PRT <213> Artificial Sequence		
20	<220> <223> recombinant TNF-alpha binder		
25	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5 10 15
30	Asp Arg Val Thr Ile Thr Cys Thr Ala Ser Gln Arg Leu Arg Asn Tyr	20	25 30
35	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35	40 45
40	Gly Ala Ala Ser Ser Thr Gln Arg Gly Val Pro Ser Arg Phe Ser Gly	50	55 60
45	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	65	70 75 80
50	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr	85	90 95
55	Thr Phe Gly Gln Gly Thr Lys Ile Glu Ile Lys	100	105
60	<210> 311 <211> 224 <212> PRT <213> Artificial Sequence		
65	<220> <223> recombinant TNF-alpha binder		
	<400> 311		
60	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg	1	5 10 15
65	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe	20	25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

20 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

<210> 312
<211> 214
<212> PRT
<213> Artificial Sequence

55 <220>
<223> recombinant TNF-alpha binder

<400> 312

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

65 Asp Arg Val Thr Ile Thr Cys Thr Ala Ser Gln Arg Leu Arg Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

	35	40	45
5	Trp Ala Ala Ser Ser Thr	Gln Arg Gly Val	Pro Ser Arg Phe Ser Gly
	50	55	60
10	Ser Gly Ser Gly Thr Asp	Phe Thr Leu Thr	Ile Ser Ser Leu Gln Pro
	65	70	75 80
15	Glu Asp Val Ala Thr Tyr Tyr Cys	Gln Arg Tyr Ile	Gln Pro Pro Tyr
	85	90	95
20	Thr Phe Gly Gln Gly Thr Lys	Ile Glu Ile Lys Arg	Thr Val Ala Ala
	100	105	110
25	Pro Ser Val Phe Ile Phe Pro	Pro Ser Asp Glu Gln	Leu Lys Ser Gly
	115	120	125
30	Thr Ala Ser Val Val Cys	Leu Leu Asn Asn Phe	Tyr Pro Arg Glu Ala
	130	135	140
35	Lys Val Gln Trp Lys Val Asp	Asn Ala Leu Gln Ser	Gly Asn Ser Gln
	145	150	155 160
40	Glu Ser Val Thr Glu Gln Asp	Ser Lys Asp Ser Thr	Tyr Ser Leu Ser
	165	170	175
45	Ser Thr Leu Thr Leu Ser Lys	Ala Asp Tyr Glu Lys	His Lys Val Tyr
	180	185	190
50	Ala Cys Glu Val Thr His	Gln Gly Leu Ser Ser	Pro Val Thr Lys Ser
	195	200	205
55	Phe Asn Arg Gly Glu Cys		
	210		
60	<210> 313		
	<211> 120		
	<212> PRT		
	<213> Artificial Sequence		
	<220>		
	<223> recombinant TNF-alpha binder		
65	<400> 313		
	Glu Val Gln Leu Val Glu Ser Gly Gly	Gly Leu Val Gln Pro Gly Arg	
	1	5	10 15
	Ser Leu Arg Leu Ser Cys Ala Ala	Ser Gly Phe Thr Phe Gly Gln Phe	
	20	25	30
	Ala Met His Trp Val Arg Gln	Ala Pro Gly Lys Gly	Leu Glu Trp Val
	35	40	45

[illegible]

<220>
<223> recombinant TNF-alpha binder

<400> 316

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 30 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 35 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 40 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 45 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 50 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 55 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 60 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 65 Phe Asn Arg Gly Glu Cys
 210
 <210> 317
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 <400> 317

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 10 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 15 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 20 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 25 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 50 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 55 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 60 <210> 318
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 318

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 5 Asp Arg Val Thr Ile Thr Cys Thr Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15 Gly Ala Ala Ser Ser Thr Gln Arg Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 20 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95
 25 Thr Phe Gly Gln Gly Thr Lys Ile Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 <210> 319
 <211> 224
 <212> PRT
 60 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 319
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

	1		5		10		15									
5	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	His	Phe
				20					25					30		
10	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
15	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val
	50						55				60					
20	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80
25	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
30	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
			100						105					110		
35	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
40	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
	130						135					140				
45	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
50	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
				165						170					175	
55	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
			180						185					190		
60	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
65	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
70	<210>	320														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
75	<220>															
	<223>	recombinant TNF-alpha binder														
80	<400>	320														
85	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1						5				10				15	

5 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Ser Ile Arg Asn Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 10 Tyr Ala Ala Ser Thr Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 15 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 20 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 25 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 30 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 35 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 50 Phe Asn Arg Gly Glu Cys
 210
 55 <210> 321
 <211> 120
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 321
 65 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30
 5
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 10 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 25 Gln Gly Thr Leu Val Thr Val Ser
 115 120
 30 <210> 322
 <211> 107
 <212> PRT
 <213> Artificial Sequence
 35 <220>
 <223> recombinant TNF-alpha binder
 <400> 322
 40 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 45 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Ser Ile Arg Asn Tyr
 20 25 30
 50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 323
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 5
 <220>
 <223> recombinant TNF-alpha binder
 <400> 323
 10
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 15 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30
 20 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 25 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 30 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 35 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 40 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 45 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 50 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 55 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 60 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 65 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 324

<211> 214
 <212> PRT
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder

<400> 324

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

15 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30

20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Trp Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

25 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

35 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

45 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

50 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

55 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

60 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

65 <210> 325
 <211> 224

<212> PRT
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder

<400> 325

10 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

15 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30

20 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

25 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

30 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

35 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

40 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

45 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

50 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

55 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

60 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

65 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

80 <210> 326
 <211> 214
 <212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 326

5

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

10

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

15

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

20

Tyr Ala Ala Ser Thr Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

25

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

30

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

35

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

40

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

45

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

50

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

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

60

Phe Asn Arg Gly Glu Cys
210

65

<210> 327

<211> 224

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

5 <400> 327

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30

15 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

20 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

25 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

30 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

35 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

40 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

45 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 328

<211> 214

65 <212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 328

5

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

10

Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Gly Ile Arg Asn Tyr
 20 25 30

15

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

20

Tyr Ala Ala Ser Trp Phe Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

25

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
 85 90 95

30

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

35

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

40

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

45

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

50

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

60

<210> 329

<211> 224

<212> PRT

65

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 329

5 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30
 15 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 20 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 25 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 30 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 35 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 40 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 45 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 50 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 55 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 60 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 65 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 330
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder

<400> 330

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 20 Tyr Ala Ala Ser Thr Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 25 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 35 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 45 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 55 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 60 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 65 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 70 Phe Asn Arg Gly Glu Cys
 210
 75 <210> 331
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 80 <220>
 <223> recombinant TNF-alpha binder

<400> 331

5	Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15
10	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe 20 25 30
15	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45
20	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60
25	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80
30	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95
35	Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110
40	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125
45	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140
50	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160
55	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175
60	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 180 185 190
65	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His 195 200 205
70	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220
75	<210> 332 <211> 214 <212> PRT <213> Artificial Sequence
80	<220> <223> recombinant TNF-alpha binder
85	<400> 332

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 5 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15 Tyr Ala Ala Ser Thr Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 25 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 <210> 333
 <211> 224
 60 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 333

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30
 10 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 15 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110
 30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 50 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 55 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Gly Pro Lys Ser Cys
 210 215 220
 <210> 334
 <211> 214
 <212> PRT
 60 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 334
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

	1	5	10	15
5	Asp	Arg Val Thr	Ile Thr Cys His Thr	Ser Met Gly Ile Arg Asn Tyr
		20	25	30
10	Leu Ala Trp Tyr	Gln Gln Lys Pro Gly Lys Ala Pro	Lys Leu Leu Ile	
		35	40	45
15	Tyr Ala Ala Ser Thr	Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly		
		50	55	60
20	Ser Gly Ser Gly Thr Asp Phe Thr	Leu Thr Ile Ser Ser Leu Gln Pro		
		65	70	75
25	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr			
		85	90	95
30	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala			
		100	105	110
35	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly			
		115	120	125
40	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala			
		130	135	140
45	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln			
		145	150	155
50	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser			
		165	170	175
55	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr			
		180	185	190
60	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser			
		195	200	205
65	Phe Asn Arg Val Glu Cys			
		210		
65	<210>	335		
	<211>	224		
	<212>	PRT		
	<213>	Artificial Sequence		
65	<220>			
	<223>	recombinant TNF-alpha binder		
65	<400>	335		
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg			
	1	5	10	15

5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 10 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 25 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Val Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 45 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 50 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 55 <210> 336
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 336
 65 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

5

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

10

Tyr Ala Ala Ser Trp Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

15

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

20

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95

25

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

30

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

35

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

40

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

45

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

50

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

60

Phe Asn Arg Gly Glu Cys
 210

<210> 337
 <211> 224
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

<400> 337

65

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

5 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

10 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

20 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

55 <210> 338
 <211> 214
 <212> PRT
 <213> Artificial Sequence

60 <220>
 <223> recombinant TNF-alpha binder
 <400> 338

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

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Val Arg Asn Tyr

	20	25	30
5	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
10	Tyr Ala Ala Ser Trp Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
15	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
20	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr 85 90 95		
25	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
30	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
35	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
40	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
45	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
50	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
55	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
60	Phe Asn Arg Gly Glu Cys 210		
65	<210> 339 <211> 224 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 339 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr 20 25 30		

5	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
		35						40					45				
	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val	
		50					55					60					
10	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr	
		65				70					75					80	
15	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
				85						90					95		
20	Ala	Lys	Val	Lys	Tyr	Leu	Ser	Thr	Ala	Ser	Gln	Leu	Asp	Tyr	Trp	Gly	
				100					105					110			
25	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	
			115					120					125				
30	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	
		130					135					140					
35	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	
		145				150					155					160	
40	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	
					165					170					175		
45	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	
			180						185					190			
50	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	
			195					200					205				
55	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	
		210					215					220					
60	<210>	340															
	<211>	214															
	<212>	PRT															
	<213>	Artificial Sequence															
65	<220>																
	<223>	recombinant TNF-alpha binder															
	<400>	340															
70	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	
	1				5					10					15		
75	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Arg	Val	Arg	Asn	Tyr	
			20						25					30			

	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
5		Tyr	Ala	Ala	Ser	Thr	Leu	Lys	Lys	Gly	Val	Pro	Ser	Arg	Phe	Ser Gly
			50					55					60			
10		Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln Pro
			65				70					75				80
15		Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asp	Arg	Pro	Pro Tyr
						85					90				95	
20		Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val Ala Ala	
					100					105					110	
25		Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys Ser Gly	
				115					120					125		
30		Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg Glu Ala	
			130					135					140			
35		Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn Ser Gln	
							150					155				160
40		Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser Leu Ser	
						165					170				175	
45		Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys Val Tyr	
					180					185					190	
50		Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val Thr Lys Ser		
				195					200					205		
55		Phe	Asn	Arg	Gly	Glu	Cys									
			210													
60	<210>	341														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
65	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	341														
70		Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro Gly Arg	
						5					10				15	
75		Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp Asp Tyr	
					20					25					30	

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

50 <210> 342
<211> 214
<212> PRT
<213> Artificial Sequence

55 <220>
<223> recombinant TNF-alpha binder
<400> 342

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

Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
20 25 30

65 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

35 40 45
 5 Tyr Ala Ala Ser Thr Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 10 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 15 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 20 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 25 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 30 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 35 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 40 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 60 <210> 343
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 65 <220>
 <223> recombinant TNF-alpha binder
 70 <400> 343
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 75 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 80 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

20 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

25 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 344
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

60 <400> 344

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

70 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

75 Leu Ala Trp Tyr Gln Gln Lys Pro Ser Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Thr Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 5
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 10
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 15
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 20
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 25
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 30
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 35
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 40
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 45
 <210> 345
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 50
 <220>
 <223> recombinant TNF-alpha binder
 <400> 345
 55
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 60
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 65
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

45 <210> 346
 <211> 214
 <212> PRT
 <213> Artificial Sequence

50 <220>
 <223> recombinant TNF-alpha binder
 <400> 346

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

60 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Gly Ile Arg Asn Tyr
 20 25 30

65 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Thr Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly

	50		55		60											
5	Ser 65	Gly	Ser	Gly	Thr	Asp 70	Phe	Thr	Leu	Thr	Ile 75	Ser	Ser	Leu	Gln	Pro 80
10	Glu	Asp	Val	Ala	Thr 85	Tyr	Tyr	Cys	Gln	Arg 90	Tyr	Asp	Arg	Pro	Pro 95	Tyr
15	Thr	Phe	Gly	Gln 100	Gly	Thr	Lys	Val	Glu 105	Ile	Lys	Arg	Thr	Val 110	Ala	Ala
20	Pro	Ser	Val 115	Phe	Ile	Phe	Pro	Pro	Ser 120	Asp	Glu	Gln	Leu	Lys 125	Ser	Gly
25	Thr 130	Ala	Ser	Val	Val	Cys	Leu 135	Leu	Asn	Asn	Phe	Tyr 140	Pro	Arg	Glu	Ala
30	Lys 145	Val	Gln	Trp	Lys	Val 150	Asp	Asn	Ala	Leu	Gln 155	Ser	Gly	Asn	Ser	Gln 160
35	Glu	Ser	Val	Thr	Glu 165	Gln	Asp	Ser	Lys	Asp 170	Ser	Thr	Tyr	Ser	Leu 175	Ser
40	Ser	Thr	Leu 180	Thr	Leu	Ser	Lys	Ala	Asp 185	Tyr	Glu	Lys	His	Lys 190	Val	Tyr
45	Ala	Cys	Glu 195	Val	Thr	His	Gln	Gly 200	Leu	Ser	Ser	Pro	Val 205	Thr	Lys	Ser
50	Phe	Asn	Arg	Gly	Glu	Cys										
55	<210>	347														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	347														
60	Glu 1	Val	Gln	Leu	Val 5	Glu	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15	Arg
65	Ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Asp 30	Asp	Tyr
	Ala	Met	His	Trp	Val 35	Arg	Gln	Ala	Pro 40	Gly	Lys	Gly	Leu 45	Glu	Trp	Val
	Ser	Ala	Ile	Thr	Trp	Asn	Ser 55	Gly	His	Val	Asp	Tyr 60	Ala	Asp	Ser	Val

5	Glu 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr 80
	Leu	Gln	Met	Asn 85	Ser	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
10	Ala	Lys	Val	Ser 100	Tyr	Leu	Ser	Thr	Ala 105	Ser	Gln	Leu	Asp	Tyr 110	Trp	Gly
15	Gln	Gly	Thr 115	Leu	Val	Thr	Val	Ser 120	Ser	Ala	Ser	Thr	Lys 125	Gly	Pro	Ser
20	Val	Phe 130	Pro	Leu	Ala	Pro	Ser 135	Ser	Lys	Ser	Thr	Ser 140	Gly	Gly	Thr	Ala
25	Ala 145	Leu	Gly	Cys	Leu	Val 150	Lys	Asp	Tyr	Phe	Pro 155	Glu	Pro	Val	Thr	Val 160
	Ser	Trp	Asn	Ser	Gly 165	Ala	Leu	Thr	Ser	Gly 170	Val	His	Thr	Phe	Pro 175	Ala
30	Val	Leu	Gln	Ser 180	Ser	Gly	Leu	Tyr	Ser 185	Leu	Ser	Ser	Val	Val 190	Thr	Val
35	Pro	Ser	Ser 195	Ser	Leu	Gly	Thr	Gln 200	Thr	Tyr	Ile	Cys	Asn 205	Val	Asn	His
40	Lys 210	Pro	Ser	Asn	Thr	Lys	Val 215	Asp	Lys	Lys	Val	Glu 220	Pro	Lys	Ser	Cys
45	<210>	348														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
	<220>															
50	<223>	recombinant TNF-alpha binder														
	<400>	348														
55	Asp 1	Ile	Gln	Met	Thr 5	Gln	Ser	Pro	Ser	Ser 10	Leu	Ser	Ala	Ser	Val 15	Gly
	Asp	Arg	Val	Thr 20	Ile	Thr	Cys	His	Thr 25	Ser	Met	Asp	Ile	Arg 30	Asn	Tyr
60	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro 40	Gly	Lys	Ala	Pro	Lys 45	Leu	Leu	Ile
65	Tyr 50	Ala	Ala	Ser	Trp	Phe	Lys 55	Ser	Gly	Val	Pro	Ser 60	Arg	Phe	Ser	Gly

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

5

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

10

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

15

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

20

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

25

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

30

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

35

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

40

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

<210> 349
 <211> 224
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

50

<400> 349

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

55

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

60

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

65

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

5 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

10 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

15 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

20 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

25 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

30 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

35 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 350
 <211> 214
 <212> PRT
 <213> Artificial Sequence

50 <220>
 <223> recombinant TNF-alpha binder
 <400> 350

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

60 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30

65 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Thr Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

	65		70		75		80
5	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr	85		90		95	
10	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100		105		110	
15	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115		120		125	
20	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130		135		140	
25	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145		150		155	160
30	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165		170		175	
35	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180		185		190	
40	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195		200		205	
45	Phe Asn Arg Gly Glu Cys	210					
50	<210> 351						
	<211> 224						
	<212> PRT						
	<213> Artificial Sequence						
55	<220>						
	<223> recombinant TNF-alpha binder						
	<400> 351						
60	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg	1	5	10		15	
65	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr	20		25		30	
	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val	35		40		45	
	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val	50		55		60	
	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr	65	70	75		80	

5	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85					90					95	
	Ala	Lys	Val	Lys	Tyr	Leu	Ser	Thr	Ala	Ser	Gln	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
10	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
15	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
20	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
25	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
30	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
35	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
40	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
	<210>	352														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
45	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	352														
50	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
55	Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Thr	Ser	Met	Arg	Val	Arg	Asn	Tyr
				20					25					30		
60	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
65	Tyr	Ala	Ala	Ser	Thr	Leu	Lys	Lys	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
70	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
85 90 95

5 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

10 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

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

20 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

25 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

30 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

35 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 353
<211> 224
<212> PRT
<213> Artificial Sequence

<220>
<223> recombinant TNF-alpha binder

<400> 353

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

55 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

60 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

5 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

10 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

15 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

20 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

30 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 354
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

45 <400> 354

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

50 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

60 Tyr Ala Ala Ser Trp Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr

BHC 08 1 060

-384 -

	85							90						95					
5	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala			
				100					105					110					
10	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly			
			115					120					125						
15	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala			
		130					135					140							
20	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln			
	145					150					155					160			
25	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser			
					165					170					175				
30	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr			
				180					185					190					
35	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser			
			195					200					205						
40	Phe	Asn	Arg	Gly	Glu	Cys													
			210																
45	<210>		355																
	<211>		224																
	<212>		PRT																
	<213>		Artificial Sequence																
50	<220>																		
	<223>		recombinant TNF-alpha binder																
55	<400>		355																
60	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg			
	1				5					10					15				
65	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Asp	Tyr			
				20					25					30					
70	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val			
			35					40					45						
75	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val			
		50					55					60							
80	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr			
	65					70					75					80			
85	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys			
										90						95			

5	Ala	Lys	Val	Lys	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
10	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
15	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
20	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
25	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
30	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
35	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
40	<210>	356														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
45	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	356														
50	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
55	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Thr	Ser	Met	Arg	Val	Arg	Asn	Tyr
				20					25					30		
60	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
65	Tyr	Ala	Ala	Ser	Trp	Leu	Gln	Lys	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
70	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
75	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asp	Arg	Pro	Pro	Tyr
					85					90					95	

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 5
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 10 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30 Phe Asn Arg Gly Glu Cys
 210
 35 <210> 357
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 357
 45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 55 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
100 105 110

5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

10 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

15 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

35 <210> 358
<211> 214
<212> PRT
<213> Artificial Sequence

40 <220>
<223> recombinant TNF-alpha binder
<400> 358

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

Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
20 25 30

50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

55 Tyr Ala Ala Ser Trp Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala

	100	105	110
5	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
10	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
15	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
20	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
25	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
30	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
35	Phe Asn Arg Gly Glu Cys 210		
40	<210> 359 <211> 120 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 359		
45	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
50	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr 20 25 30		
55	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
60	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
65	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
	Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly 100 105 110		

5 Gln Gly Thr Leu Val Thr Val Ser
 115 120

 <210> 360
 <211> 107
 <212> PRT
 10 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder

 15 <400> 360

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

 20 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

 25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

 30 Tyr Ala Ala Ser Trp Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

 35 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

 40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

 45 <210> 361
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 50 <220>
 <223> recombinant TNF-alpha binder

 <400> 361

 55 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

 65 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val

50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

15 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

55 <210> 362
<211> 214
<212> PRT
<213> Artificial Sequence

60 <220>
<223> recombinant TNF-alpha binder

65 <400> 362

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

75 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
20 25 30

80 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

85 Tyr Ala Ala Ser Thr Leu Gln Lys Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

5 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 10 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 15 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 20 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 25 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 30 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 35 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 40 Phe Asn Arg Gly Glu Cys
 210
 45 <210> 363
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 50 <400> 363
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 55 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Phe
 20 25 30
 60 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 65 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 5
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 10
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 15
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 20
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 25
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 30
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 35
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 40
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 364
 <211> 214
 <212> PRT
 45 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 50 <400> 364
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 55
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
 20 25 30
 60
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 65
 Tyr Ala Ala Ser Ser Thr Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

5 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
 85 90 95

10 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

15 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

25 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

30 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

35 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

40 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

45 Phe Asn Arg Gly Glu Cys
 210

50 <210> 365
 <211> 224
 <212> PRT
 <213> Artificial Sequence

55 <220>
 <223> recombinant TNF-alpha binder
 <400> 365

60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

65 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

70 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

75 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

80 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr

	65		70		75		80									
5	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
10	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Gln	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
15	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
20	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
	130						135					140				
25	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
30	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
35	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
40	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
	210						215					220				
45	<210>	366														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
50	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	366														
55	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
60	Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Thr	Ser	Met	Gly	Ile	Arg	Asn	Tyr
			20						25					30		
65	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35						40					45			
70	Arg	Ala	Ala	Ser	Trp	Leu	Lys	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
75	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65				70					75					80	

5	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asp	Arg	Ala	Pro	Tyr	
					85					90					95		
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala	
				100					105					110			
10	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	
			115					120					125				
15	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	
		130					135					140					
20	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	
	145				150						155					160	
25	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser	
					165					170					175		
30	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr	
				180					185					190			
35	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser	
			195					200					205				
40	Phe	Asn	Arg	Val	Glu	Cys											
		210															
	<210>	367															
	<211>	224															
	<212>	PRT															
	<213>	Artificial Sequence															
45	<220>																
	<223>	recombinant TNF-alpha binder															
	<400>	367															
50	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg	
	1			5						10					15		
55	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Asp	Tyr	
				20					25					30			
60	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
			35					40					45				
65	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val	
		50					55					60					
70	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr	
	65					70					75					80	

	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85					90					95	
5	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Gln	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
10	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
15	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
	130						135					140				
20	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
25	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
30	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
35	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
40	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
	<210>		368													
	<211>		214													
	<212>		PRT													
	<213>		Artificial Sequence													
	<220>															
45	<223>		recombinant TNF-alpha binder													
	<400>		368													
50	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
55	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Thr	Ser	Met	Arg	Val	Arg	Asn	Tyr
				20					25					30		
60	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
65	Tyr	Ala	Ala	Ser	Trp	Leu	Lys	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
70	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

5 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

10 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

25 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

30 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

35 Phe Asn Arg Gly Glu Cys
 210

40 <210> 369
 <211> 224
 <212> PRT
 <213> Artificial Sequence

45 <220>
 <223> recombinant TNF-alpha binder

50 <400> 369

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

55 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

60 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

65 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

		85		90		95
5	Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly	100		105		110
10	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser	115		120		125
15	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala	130		135		140
20	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val	145		150		155
25	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala	165		170		175
30	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val	180		185		190
35	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His	195		200		205
40	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys	210		215		220
45	<210> 370					
	<211> 214					
	<212> PRT					
	<213> Artificial Sequence					
50	<220>					
	<223> recombinant TNF-alpha binder					
55	<400> 370					
60	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5	10		15
65	Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr	20		25		30
70	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35		40		45
75	Tyr Ala Ala Ser Trp Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly	50		55		60
80	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	65		70		75
85	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr	85		90		95

5 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 10 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 25 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30 Phe Asn Arg Gly Glu Cys
 210
 35 <210> 371
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 371
 45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 55 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110
 5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 10 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 15 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 20 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 25 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 30 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 35 <210> 372
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 372
 45 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 50 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 55 Tyr Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 60 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

5 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30 Phe Asn Arg Gly Glu Cys
 210

35 <210> 373
 <211> 224
 <212> PRT
 <213> Artificial Sequence

40 <220>
 <223> recombinant TNF-alpha binder
 <400> 373

45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

50 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly

100 105 110
 5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 10 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 15 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 20 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 25 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 30 <210> 374
 <211> 214
 <212> PRT
 35 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 40 <400> 374
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 45 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30
 50 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 55 Arg Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
 85 90 95
 65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

5	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	
			115					120					125				
	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	
		130					135					140					
10	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	
	145					150					155					160	
15	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser	
					165					170					175		
20	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr	
				180					185					190			
25	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser	
			195					200					205				
	Phe	Asn	Arg	Gly	Glu	Cys											
		210															
30	<210>	375															
	<211>	120															
	<212>	PRT															
	<213>	Artificial Sequence															
35	<220>																
	<223>	recombinant TNF-alpha binder															
40	<400>	375															
	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg	
	1				5					10					15		
45	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Asp	Tyr	
				20					25					30			
50	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
			35					40					45				
	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val	
		50					55					60					
	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr	
	65					70					75					80	
60	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
					85					90					95		
65	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly	
				100					105					110			

Gln Gly Thr Leu Val Thr Val Ser
 115 120

5

<210> 376
 <211> 107
 <212> PRT
 <213> Artificial Sequence

10

<220>
 <223> recombinant TNF-alpha binder

<400> 376

15

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

20

Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

25

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

30

Arg Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

35

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
 85 90 95

40

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

45

<210> 377
 <211> 224
 <212> PRT
 <213> Artificial Sequence

50

<220>
 <223> recombinant TNF-alpha binder

<400> 377

55

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

60

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

65

Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

5 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

10 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

15 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

20 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

25 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

30 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

35 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

40 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

55 <210> 378
 <211> 214
 <212> PRT
 <213> Artificial Sequence

60 <220>
 <223> recombinant TNF-alpha binder

65 <400> 378

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

75 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

80 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

85 Tyr Ala Ala Ser Trp Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

5

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

10

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

15

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

20

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

25

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

30

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

35

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

40

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

45

<210> 379
 <211> 224
 <212> PRT
 <213> Artificial Sequence

50

<220>
 <223> recombinant TNF-alpha binder

55

<400> 379

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

60

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

65

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

5 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

10 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

15 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

20 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

30 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

40 <210> 380
 <211> 214
 <212> PRT
 <213> Artificial Sequence

45 <220>
 <223> recombinant TNF-alpha binder

50 <400> 380
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

55 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

60 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

	65	70	75	80
5	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr	85	90	95
10	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105	110
15	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120	125
20	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135	140
25	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150	155
30	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170	175
35	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185	190
40	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	200	205
45	Phe Asn Arg Gly Glu Cys	210		
50	<210> 381 <211> 224 <212> PRT <213> Artificial Sequence			
55	<220> <223> recombinant TNF-alpha binder <400> 381			
60	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg	1	5	10
65	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr	20	25	30
70	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val	35	40	45
75	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val	50	55	60
80	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr	65	70	75

5	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85					90					95	
	Ala	Lys	Val	Lys	Tyr	Leu	Ser	Thr	Ala	Ser	Gln	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
10	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
15	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
20	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
25	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
30	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
35	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
40	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
	<210>	382														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
45	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	382														
50	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
55	Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Thr	Ser	Met	Arg	Val	Arg	Asn	Tyr
				20					25					30		
60	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
65	Tyr	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
70	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 5
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 10
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 15
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 20
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 25
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 30
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 35
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 40
 Phe Asn Arg Gly Glu Cys
 210
 <210> 383
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 45
 <220>
 <223> recombinant TNF-alpha binder
 <400> 383
 50
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 55
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 60
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 65
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 70
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

5 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

10 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

15 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

20 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

25 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

30 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 384
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

45 <400> 384

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

50 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

60 Tyr Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Pro Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr

	85	90	95
5	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
10	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
15	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
20	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
25	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
30	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
35	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
40	Phe Asn Arg Gly Glu Cys 210		
45	<210> 385 <211> 224 <212> PRT <213> Artificial Sequence		
50	<220> <223> recombinant TNF-alpha binder		
55	<400> 385		
60	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
65	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr 20 25 30		
70	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
75	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val 50 55 60		
80	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
85	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		

5	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly	
				100					105					110			
10	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	
			115					120					125				
15	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	
		130					135					140					
20	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	
				165						170					175		
25	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	
			180						185					190			
30	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	
			195					200					205				
35	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	
		210					215					220					
40	<210>	386															
	<211>	214															
	<212>	PRT															
	<213>	Artificial Sequence															
45	<220>																
	<223>	recombinant TNF-alpha binder															
	<400>	386															
50	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	
	1				5					10					15		
55	Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Thr	Ser	Met	Arg	Val	Arg	Asn	Tyr	
			20						25					30			
60	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	
			35					40					45				
65	Arg	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	
		50					55					60					
70	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	
	65					70					75					80	
75	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asp	Arg	Pro	Pro	Tyr	
				85						90						95	

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 5
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 10 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 15 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 20 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30 Phe Asn Arg Gly Glu Cys
 210
 35 <210> 387
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 40 <220>
 <223> recombinant TNF-alpha binder
 <400> 387
 45 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 55 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

5 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

10 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

15 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

20 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

25 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

<210> 388
<211> 214
<212> PRT
<213> Artificial Sequence

40 <220>
<223> recombinant TNF-alpha binder
<400> 388

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

50 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr
20 25 30

55 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

65 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

65 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala

100 105 110
 5 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 10 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 15 Asp Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 30 Phe Asn Arg Gly Glu Cys
 210
 <210> 389
 <211> 224
 <212> PRT
 35 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 40 <400> 389
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 45 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 50 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 55 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 65 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

5	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	
			115					120					125			
10	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
15	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
20	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
25	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
				180					185					190		
30	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
35	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
40	<210>	390														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
45	<220>															
	<223>	recombinant TNF-alpha binder														
50	<400>	390														
55	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
	1				5					10					15	
60	Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Ala	Ser	Gln	Arg	Val	Arg	Asn	Tyr
				20					25					30		
65	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
70	Arg	Ala	Ala	Ser	Trp	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50					55					60				
75	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
80	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asp	Arg	Ala	Pro	Tyr
					85					90					95	
85	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 5
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 10 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 15 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 25 Phe Asn Arg Gly Glu Cys
 210
 30 <210> 391
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 35 <220>
 <223> recombinant TNF-alpha binder
 <400> 391
 40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 45 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 50 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 65 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

10 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

15 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

30 <210> 392
 <211> 214
 <212> PRT
 <213> Artificial Sequence

35 <220>
 <223> recombinant TNF-alpha binder
 <400> 392

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

45 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

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

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

60 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

65 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

	115	120	125
5	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
10	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
15	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
20	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
25	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
30	Phe Asn Arg Gly Glu Cys 210		
35	<210> 393 <211> 224 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 393		
40	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15		
45	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr 20 25 30		
50	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45		
55	Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val 50 55 60		
60	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80		
65	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95		
	Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly 100 105 110		
	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		

5 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 20 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 25 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 394
 <211> 214
 <212> PRT
 30 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 35 <400> 394
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 50 Arg Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

5

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

10

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

15

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

20

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

25

Phe Asn Arg Gly Glu Cys
 210

30

<210> 395
 <211> 224
 <212> PRT
 <213> Artificial Sequence

35

<220>
 <223> recombinant TNF-alpha binder
 <400> 395

40

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

45

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

50

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55

Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

70

Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

75

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

5 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

25 <210> 396
 <211> 214
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 396

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

40 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

50 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala

	130		135		140
5	Lys Val Gln Trp	Lys Val Asp Asn Ala Leu	Gln Ser Gly Asn Ser Gln		
	145	150	155		160
10	Glu Ser Val Thr	Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser			
		165	170		175
15	Ser Thr Leu Thr	Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr			
		180	185		190
20	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser				
		195	200		205
25	Phe Asn Arg Gly Glu Cys				
	210				
30	<210> 397				
	<211> 224				
	<212> PRT				
	<213> Artificial Sequence				
35	<220>				
	<223> recombinant TNF-alpha binder				
	<400> 397				
40	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg				
	1	5	10		15
45	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr				
		20	25		30
50	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val				
		35	40		45
55	Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val				
	50	55	60		
60	Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr				
	65	70	75		80
65	Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys				
		85	90		95
70	Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly				
		100	105		110
75	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Ala Lys Gly Pro Ser				
		115	120		125
80	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala				
	130	135	140		

5 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

10 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

25 <210> 398
 <211> 214
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder

35 <400> 398

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

Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

40 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

45 Arg Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5

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

10

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20

Phe Asn Arg Gly Glu Cys
 210

<210> 399
 <211> 224
 <212> PRT
 <213> Artificial Sequence

25

<220>
 <223> recombinant TNF-alpha binder

30

<400> 399

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

35

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

40

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

50

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

55

Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

60

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

65

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

10 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 400
 <211> 214
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

30 <400> 400

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

40 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln

145 150 155 160
 -
 5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

 15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 20 Phe Asn Arg Gly Glu Cys
 210

 25 <210> 401
 <211> 120
 <212> PRT
 <213> Artificial Sequence

 30 <220>
 <223> recombinant TNF-alpha binder

 <400> 401

 35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

 45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 50 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 65 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

 60 Gln Gly Thr Leu Val Thr Val Ser
 115 120

 65 <210> 402
 <211> 107
 <212> PRT
 <213> Artificial Sequence

 <220>

<223> recombinant TNF-alpha binder

<400> 402

```

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

10  Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
    20             25             30

15  Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
    35             40             45

20  Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50             55             60

25  Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
    65             70             75             80

30  Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
    85             90             95

35  Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
    100            105

<210> 403
<211> 224
35  <212> PRT
    <213> Artificial Sequence

<220>
<223> recombinant TNF-alpha binder
40  <400> 403

45  Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
    1             5             10             15

50  Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
    20             25             30

55  Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
    35             40             45

60  Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
    50             55             60

65  Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
    65             70             75             80

    Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
    85             90             95

65  Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly

```

	100	105	110
5	Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 115 120 125		
10	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
15	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
20	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		
25	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 180 185 190		
30	Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Ile Cys Asn Val Asn His 195 200 205		
35	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
	<210> 404 <211> 214 <212> PRT <213> Artificial Sequence		
40	<220> <223> recombinant TNF-alpha binder <400> 404		
45	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
50	Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr 20 25 30		
55	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
60	Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
65	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr 85 90 95		
	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		

5	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	
			115					120					125				
	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	
		130					135					140					
10	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	
	145					150					155					160	
15	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser	
					165					170					175		
20	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr	
				180					185					190			
25	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser	
			195					200					205				
	Phe	Asn	Arg	Gly	Glu	Cys											
			210														
30	<210>		405														
	<211>		224														
	<212>		PRT														
	<213>		Artificial Sequence														
35	<220>																
	<223>		recombinant	TNF-alpha	binder												
	<400>		405														
40	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg	
	1				5					10					15		
45	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Asp	Tyr	
				20					25					30			
50	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
			35					40					45				
55	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val	
		50					55					60					
60	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr	
	65					70					75					80	
65	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
					85					90					95		
70	Ala	Lys	Val	Lys	Tyr	Leu	Ser	Thr	Ala	Ser	Gln	Leu	Asp	Tyr	Trp	Gly	
				100					105					110			

	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	
				115				120					125				
5																	
	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	
		130					135					140					
10																	
	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	
	145					150					155					160	
15																	
	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	
					165					170					175		
20																	
	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	
				180					185					190			
25																	
	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	
			195					200					205				
30																	
	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	
		210					215					220					
35																	
	<210>	406															
	<211>	214															
	<212>	PRT															
	<213>	Artificial Sequence															
40																	
	<220>																
	<223>	recombinant TNF-alpha binder															
	<400>	406															
45																	
	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	
	1				5					10					15		
50																	
	Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Ala	Ser	Gln	Arg	Val	Arg	Asn	Tyr	
			20					25						30			
55																	
	Leu	Ala	Trp	Tyr	Gln	Gln	Lys										

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

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

10 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

15 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

20 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

25 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

30 Phe Asn Arg Gly Glu Cys
 210

35 <210> 407
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 <400> 407

40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

45 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

50 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

55 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

60 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

70 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

75 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser

	115	120	125
5	Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 130 135 140		
10	Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val 145 150 155 160		
15	Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 165 170 175		
20	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 180 185 190		
25	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His 195 200 205		
30	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
35	<210> 408 <211> 214 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 408		
40	Asn Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
45	Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr 20 25 30		
50	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
55	Tyr Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
60	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
65	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr 85 90 95		
	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		

5 Thr Ala Ser Val Val Cys Leu Pro Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 10 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 15 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 20 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 25 Phe Asn Arg Gly Glu Cys
 210
 <210> 409
 <211> 224
 <212> PRT
 30 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 35 <400> 409
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 50 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 60 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110
 65 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 5
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 10 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 15 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 20 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 25
 <210> 410
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 30
 <220>
 <223> recombinant TNF-alpha binder
 <400> 410
 35 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 40 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30
 45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Trp Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
 85 90 95
 60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 65 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130						135					140				
5	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
	145					150					155					160
10	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
					165					170					175	
15	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
				180					185					190		
20	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
			195					200					205			
25	Phe	Asn	Arg	Gly	Glu	Cys										
	210															
30	<210>	411														
	<211>	224														
	<212>	PRT														
	<213>	Artificial Sequence														
35	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	411														
40	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5					10					15	
45	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Asp	Tyr
				20					25					30		
50	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
55	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val
	50					55					60					
60	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70				75						80
65	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
70	Ala	Lys	Val	Lys	Tyr	Leu	Ser	Thr	Ala	Ser	Gln	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
75	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
80	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala

	130		135		140											
5	Ala 145	Leu	Gly	Cys	Leu 150	Val	Lys	Asp	Tyr	Phe	Pro 155	Glu	Pro	Val	Thr	Val 160
10	Ser	Trp	Asn	Ser	Gly 165	Ala	Leu	Thr	Ser	Gly 170	Val	His	Thr	Phe	Pro	Ala 175
15	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
			180						185					190		
20	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His
			195					200					205			
25	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys
		210					215					220				
	<210>	412														
	<211>	214														
	<212>	PRT														
	<213>	Artificial Sequence														
30	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	412														
35	Asp 1	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
				5						10					15	
40	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Arg	Val	Arg	Asn	Tyr
				20					25					30		
45	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
			35					40					45			
50	Tyr	Ala	Ala	Ser	Trp	Leu	Lys	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
55	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75				80	
60	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Asp	Arg	Pro	Pro	Tyr
					85					90					95	
65	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
70	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
75	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130						135					140				

5 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 20 Phe Asn Arg Gly Glu Cys
 210
 <210> 413
 <211> 224
 25 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 30 <400> 413
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 35 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30
 40 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 45 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 50 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 55 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110
 60 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 65 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 10 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 15 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 20 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 414
 <211> 214
 <212> PRT
 25 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 30 <400> 414
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 35 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30
 40 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 45 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 60 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 65 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

10 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

15 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

20 Phe Asn Arg Gly Glu Cys
 210

25 <210> 415
 <211> 224
 <212> PRT
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder
 <400> 415

35 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30

45 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

50 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

55 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

60 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

65 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

70 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

75 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

80 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val

145 150 155 160
 5 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 20 <210> 416
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 25 <220>
 <223> recombinant TNF-alpha binder
 <400> 416
 30 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 35 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30
 40 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95
 55 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 60 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

5 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 10 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

 15 Phe Asn Arg Gly Glu Cys
 210

 20 <210> 417
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 25 <220>
 <223> recombinant TNF-alpha binder

 <400> 417

 30 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30
 35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 40 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 45 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 50 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 60 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

 65 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 5
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 10 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 15 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 20 <210> 418
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 25 <400> 418
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 30 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30
 35 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 40 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 45 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 50 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 55 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 60 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 65 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

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

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

10 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

15 Phe Asn Arg Gly Glu Cys
 210

20 <210> 419
 <211> 224
 <212> PRT
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

30 <400> 419

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

35 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30

40 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

45 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

50 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

55 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

60 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

65 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

70 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

75 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

80 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala

	165	170	175
5	Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val	180	185 190
10	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His	195	200 205
15	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys	210	215 220
20	<210> 420		
	<211> 214		
	<212> PRT		
	<213> Artificial Sequence		
25	<220>		
	<223> recombinant TNF-alpha binder		
	<400> 420		
30	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5 10 15
35	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35	40 45
40	Arg Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	50	55 60
45	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	65	70 75 80
50	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr	85	90 95
55	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105 110
60	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120 125
	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135 140
65	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150 155 160
	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170 175

5 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 10 Phe Asn Arg Gly Glu Cys
 210
 15 <210> 421
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 20 <220>
 <223> recombinant TNF-alpha binder
 <400> 421
 25 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30
 35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 50 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110
 55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 65 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

5

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

10

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

15

<210> 422
 <211> 214
 <212> PRT
 <213> Artificial Sequence

20

<220>
 <223> recombinant TNF-alpha binder
 <400> 422

25

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

30

Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

35

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

40

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

45

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

50

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

55

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

60

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

65

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

70

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

75

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

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

5 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

10 Phe Asn Arg Gly Glu Cys
 210

15 <210> 423
 <211> 224
 <212> PRT
 <213> Artificial Sequence

20 <220>
 <223> recombinant TNF-alpha binder
 <400> 423

25 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30

35 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

40 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

45 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

50 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

55 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

60 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

65 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

65 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val

	180	185	190		
5	Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His	195	200	205	
10	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys	210	215	220	
15	<210> 424				
	<211> 214				
	<212> PRT				
	<213> Artificial Sequence				
	<220>				
	<223> recombinant TNF-alpha binder				
20	<400> 424				
	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly	1	5	10	15
25	Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr	20	25	30	
30	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35	40	45	
35	Arg Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	50	55	60	
40	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro	65	70	75	80
45	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr	85	90	95	
	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105	110	
50	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120	125	
55	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135	140	
60	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150	155	160
	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170	175	
65	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185	190	

	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
5			195					200					205			
	Phe	Asn	Arg	Gly	Glu	Cys										
		210														
10	<210>	425														
	<211>	224														
	<212>	PRT														
15	<213>	Artificial Sequence														
	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	425														
20	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5					10					15	
25	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Gly	His	Phe
				20					25					30		
30	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
35	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Val	Asp	Tyr	Ala	Asp	Ser	Val
		50					55					60				
40	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
	65					70					75					80
45	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
50	Ala	Lys	Val	Lys	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly
				100					105					110		
55	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser
			115					120					125			
60	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala
		130					135					140				
65	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val
	145					150					155					160
70	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala
					165					170					175	
75	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val
					180				185					190		

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

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

10 <210> 426
 <211> 214
 <212> PRT
 <213> Artificial Sequence

15 <220>
 <223> recombinant TNF-alpha binder
 <400> 426

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

25 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

30 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

35 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

40 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95

45 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

50 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

5 Phe Asn Arg Gly Glu Cys
 210

10 <210> 427
 <211> 224
 <212> PRT
 <213> Artificial Sequence

15 <220>
 <223> recombinant TNF-alpha binder
 <400> 427

20 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

25 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30

30 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

35 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

40 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

55 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

60 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

65 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

70 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

75 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

80 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His

	195	200	205
5	Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys 210 215 220		
10	<210> 428 <211> 214 <212> PRT <213> Artificial Sequence		
15	<220> <223> recombinant TNF-alpha binder <400> 428		
20	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
25	Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr 20 25 30		
30	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
35	Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
40	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
45	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr 85 90 95		
50	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
55	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
60	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
65	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		

5 Phe Asn Arg Gly Glu Cys
 210
 <210> 429
 <211> 224
 <212> PRT
 10 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 15 <400> 429
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 20 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30
 25 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 30 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 35 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 40 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 45 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 50 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 55 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 60 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 65 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205

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

5

<210> 430
 <211> 214
 <212> PRT
 <213> Artificial Sequence

10

<220>
 <223> recombinant TNF-alpha binder

15

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

20

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

25

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

30

Arg Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

35

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

40

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95

45

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

50

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

55

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

60

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

65

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

70

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

75

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
210

5 <210> 431
 <211> 224
 <212> PRT
 <213> Artificial Sequence

10 <220>
 <223> recombinant TNF-alpha binder
 <400> 431

15 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

20 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30

25 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

30 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

35 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

40 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

45 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

50 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

55 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

60 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

65 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

70 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

80 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys

	210	215	220
5	<210> 432 <211> 214 <212> PRT <213> Artificial Sequence		
10	<220> <223> recombinant TNF-alpha binder <400> 432		
15	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15		
20	Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Val Arg Asn Tyr 20 25 30		
25	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
30	Arg Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
35	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
40	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr 85 90 95		
45	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
50	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
55	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
60	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
65	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
	Phe Asn Arg Gly Glu Cys 210		

5 <210> 433
 <211> 224
 <212> PRT
 <213> Artificial Sequence

 10 <220>
 <223> recombinant TNF-alpha binder
 <400> 433

 15 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

 20 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 25 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 30 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 35
 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

 40 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 45 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

 50 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 55
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 434
 <211> 214
 <212> PRT
 5 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder
 10 <400> 434

 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 15 Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30
 20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 25 Tyr Ala Ala Ser Thr Leu Lys Lys Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 50 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ser
 130 135 140
 55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210

<210> 435
 <211> 224
 <212> PRT
 <213> Artificial Sequence

5

<220>
 <223> recombinant TNF-alpha binder

10

<400> 435

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

20

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

25

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

30

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

35

Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

40

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

45

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

50

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

55

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

60

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

65

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

<210> 436

<211> 214
 <212> PRT
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder
 <400> 436

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

15 Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

25 Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

30 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

35 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95

40 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

45 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

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

55 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

60 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

65 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

<210> 437
 <211> 224

<212> PRT
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder

<400> 437

10 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

15 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30

20 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

25 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

30 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

35 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

40 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

45 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

50 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

55 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

60 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

65 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

80 <210> 438
 <211> 214
 <212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 438

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

Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Trp Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

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

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

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

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 439

<211> 224

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

5 <400> 439

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

15 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

20 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

25 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

30 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

35 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

40 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

45 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

<210> 440

<211> 214

65 <212> PRT

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 440

5

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

10

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

15

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

20

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

25

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95

30

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

35

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

40

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

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

45

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

50

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

60

<210> 441

<211> 224

<212> PRT

65

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 441

5 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
20 25 30

15 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

20 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

25 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

30 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

45 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

50 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

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

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

60 <210> 442
<211> 214
<212> PRT
<213> Artificial Sequence

65 <220>
<223> recombinant TNF-alpha binder

<400> 442

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 20 Tyr Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 25 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 30 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 35 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 40 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 45 Thr Ala Ser Val Val Cys Leu Pro Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 50 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 55 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 60 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 65 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 70 Phe Asn Arg Gly Glu Cys
 210
 75 <210> 443
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 80 <220>
 <223> recombinant TNF-alpha binder

<400> 443

5 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Phe
 20 25 30

 10 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

 15 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

 20 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

 30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

 35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

 40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

 60 <210> 444
 <211> 214
 <212> PRT
 <213> Artificial Sequence

 <220>
 65 <223> recombinant TNF-alpha binder

 <400> 444

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 5 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr
 20 25 30
 10 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 15 Tyr Ala Ala Ser Thr Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr
 85 90 95
 25 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 30 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 35 Thr Ala Ser Val Val Cys Leu Pro Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 45 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 50 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 55 Phe Asn Arg Gly Glu Cys
 210
 60 <210> 445
 <211> 224
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 445

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly His
 1 5 10 15
 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30
 10 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 15 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60
 20 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 45 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 50 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 55 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 60 <210> 446
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 446
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

	1	5	10	15
5	Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Arg Val Arg Asn Tyr	20	25	30
10	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile	35	40	45
15	Arg Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly	50	55	60
20	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Ala Pro Tyr	85	90	95
25	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105	110
30	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120	125
35	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135	140
40	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150	155
45	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170	175
50	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185	190
55	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	200	205
60	Phe Asn Arg Gly Glu Cys	210		
65	<210> 447			
	<211> 224			
	<212> PRT			
	<213> Artificial Sequence			
	<220>			
	<223> recombinant TNF-alpha binder			
	<400> 447			
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly His	1	5	10
				15

5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly His Phe
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 10 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 25 Ala Lys Val Lys Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 30 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 35 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Pro Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 45 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 50 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 55 <210> 448
 <211> 214
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 448
 65 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys His Thr Ser Met Arg Val Arg Asn Tyr
 20 25 30

5

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

10

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

15

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

20

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Pro Pro Tyr
 85 90 95

25

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

30

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

35

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

40

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

45

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

50

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

55

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

60

Phe Asn Arg Gly Glu Cys
 210

<210> 449
 <211> 224
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

<400> 449

65

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30

5 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

10 Ser Ala Ile Thr Trp Asn Ser Gly His Val Asp Tyr Ala Asp Ser Val
 50 55 60

15 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Gln Leu Asp Tyr Trp Gly
 100 105 110

30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

40 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

45 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

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

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

55 <210> 450
 <211> 214
 <212> PRT
 <213> Artificial Sequence

60 <220>
 <223> recombinant TNF-alpha binder

65 <400> 450

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

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr

	20	25	30
5	Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45		
10	Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60		
15	Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80		
20	Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asp Arg Pro Pro Tyr 85 90 95		
25	Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala 100 105 110		
30	Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly 115 120 125		
35	Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140		
40	Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160		
45	Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175		
50	Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190		
55	Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205		
60	Phe Asn Arg Gly Glu Cys 210		
65	<210> 451 <211> 224 <212> PRT <213> Artificial Sequence <220> <223> recombinant TNF-alpha binder <400> 451 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Gln Phe 20 25 30		

5	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
		35						40					45				
	Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val	
		50					55					60					
10	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr	
	65					70					75					80	
15	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
				85						90					95		
20	Ala	Lys	Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Tyr	Trp	Gly	
				100					105					110			
25	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	
			115					120					125				
30	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	
		130					135					140					
35	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	
	145					150					155					160	
40	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	
					165					170					175		
45	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	
			180						185					190			
50	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	
			195					200					205				
55	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	
		210					215					220					
	<210>	452															
	<211>	214															
	<212>	PRT															
	<213>	Artificial Sequence															
	<220>																
	<223>	recombinant TNF-alpha binder															
	<400>	452															
60	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	
	1				5					10					15		
65	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Arg	Leu	Arg	Asn	Tyr	
				20					25					30			

	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
	35							40					45			
5																
	Gly	Ala	Ala	Ser	Ser	Thr	Ile	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50						55					60				
10																
	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
	65					70					75					80
15																
	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Arg	Tyr	Ile	Gln	Pro	Pro	Tyr
					85					90					95	
20																
	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100					105					110		
25																
	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
			115					120					125			
30																
	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
	130						135					140				
35																
	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
	145					150					155					160
40																
	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
					165					170					175	
45																
	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
				180					185					190		
50																
	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
			195					200					205			
55																
	Phe	Asn	Arg	Gly	Glu	Cys										
	210															
60																
	<210>	453														
	<211>	120														
	<212>	PRT														
	<213>	Artificial Sequence														
65																
	<220>															
	<223>	recombinant TNF-alpha binder														
	<400>	453														
70																
	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5					10					15	
75		</														

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

5 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
50 55 60

10 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

15 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

20 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser
115 120

25 <210> 454
<211> 107
<212> PRT
<213> Artificial Sequence

30 <220>
<223> recombinant TNF-alpha binder
<400> 454

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

40 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Leu Arg Asn Tyr
20 25 30

45 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Gly Ala Ala Ser Ser Thr Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

50 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

55 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Ile Gln Pro Pro Tyr
85 90 95

60 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

65 <210> 455
<211> 224
<212> PRT
<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 455

5

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

10

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

15

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

20

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

25

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

30

Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110

35

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

40

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140

45

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

50

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

55

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

60

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

<210> 456

<211> 214

<212> PRT

65

<213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

<400> 456

5 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
 20 25 30
 15 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 20 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 25 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
 85 90 95
 30 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110
 35 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140
 40 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160
 45 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175
 50 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190
 55 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205
 Phe Asn Arg Gly Glu Cys
 210
 60 <210> 457
 <211> 470
 <212> PRT
 <213> Artificial Sequence
 65 <220>
 <223> recombinant TNF-alpha binder

<400> 457

5 Met Glu Phe Gly Leu Arg Trp Val Phe Leu Val Ala Ile Leu Lys Asp
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 10 20 25 30
 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 15 35 40 45
 Asp Gln Phe Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 20 Glu Trp Val Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala
 65 70 75 80
 25 Asp Ser Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
 85 90 95
 Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 30 100 105 110
 Tyr Tyr Cys Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp
 115 120 125
 35 Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys
 130 135 140
 40 Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly
 145 150 155 160
 45 Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
 165 170 175
 Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr
 50 180 185 190
 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
 195 200 205
 55 Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn
 210 215 220
 60 Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro
 225 230 235 240
 65 Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
 245 250 255

Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
 260 265 270

5 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
 275 280 285

10 Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
 290 295 300

15 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
 305 310 315 320

20 Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
 325 330 335

25 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
 340 345 350

30 Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
 355 360 365

35 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
 385 390 395 400

40 Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
 405 410 415

45 Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 420 425 430

50 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 435 440 445

55 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
 450 455 460

60 Ser Leu Ser Pro Gly Lys
 465 470

<210> 458
 <211> 236
 <212> PRT
 <213> Artificial Sequence

65 <220>
 <223> recombinant TNF-alpha binder

<400> 458

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp

	1	5	10	15
5	Phe	Pro Gly	Ala Arg Cys Asp Ile Gln Met Thr Gln Ser	Pro Ser Ser
		20	25	30
10	Leu	Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser		
		35	40	45
15	Gln Gly Ile Arg Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys			
	50	55	60	
20	Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Trp Leu Gln Ser Gly Val			
	65	70	75	80
25	Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr			
		85	90	95
30	Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg			
		100	105	110
35	Tyr Ile Gln Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile			
		115	120	125
40	Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp			
		130	135	140
45	Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn			
	145	150	155	160
50	Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu			
		165	170	175
55	Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp			
		180	185	190
60	Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr			
		195	200	205
65	Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser			
	210	215	220	
70	Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys			
	225	230	235	
75	<210> 459			
	<211> 470			
	<212> PRT			
	<213> Artificial Sequence			
80	<220>			
	<223> recombinant TNF-alpha binder			

<400> 459

5 Met Glu Phe Gly Leu Arg Trp Val Phe Leu Val Ala Ile Leu Lys Asp
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 10 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 15 Asp Gly Phe Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 20 Glu Trp Val Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala
 65 70 75 80
 Asp Ser Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
 85 90 95
 25 Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 30 Tyr Tyr Cys Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp
 115 120 125
 35 Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys
 130 135 140
 40 Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly
 145 150 155 160
 Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
 165 170 175
 45 Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr
 180 185 190
 50 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
 195 200 205
 55 Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn
 210 215 220
 60 Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro
 225 230 235 240
 Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
 245 250 255
 65 Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp

	260	265	270
5	Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp 275 280 285		
10	Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly 290 295 300		
15	Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn 305 310 315 320		
20	Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp 325 330 335		
25	Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu 355 360 365		
30	Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn 370 375 380		
35	Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile 385 390 395 400		
40	Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr 405 410 415		
45	Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys 420 425 430		
50	Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys 435 440 445		
55	Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu 450 455 460		
60	Ser Leu Ser Pro Gly Lys 465 470		
65	<210> 460 <211> 236 <212> PRT <213> Artificial Sequence		
	<220> <223> recombinant TNF-alpha binder		
	<400> 460		
	Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp 1 5 10 15		

5 Phe Pro Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
 20 25 30
 Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
 35 40 45
 10 Gln Gly Ile Arg Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys
 50 55 60
 15 Ala Pro Lys Leu Leu Ile Ser Ala Ala Gly Trp Leu Gln Ser Gly Val
 65 70 75 80
 20 Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 85 90 95
 25 Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg
 100 105 110
 Tyr Asn Gln Ala Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 115 120 125
 30 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 130 135 140
 35 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160
 40 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 165 170 175
 45 Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
 180 185 190
 Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
 195 200 205
 50 Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 210 215 220
 55 Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235
 60 <210> 461
 <211> 470
 <212> PRT
 <213> Artificial Sequence
 65 <220>
 <223> recombinant TNF-alpha binder
 <400> 461

Met Glu Phe Gly Leu Arg Trp Val Phe Leu Val Ala Ile Leu Lys Asp
 1 5 10 15
 5 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 10 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 15 Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 20 Glu Trp Val Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala
 65 70 75 80
 Asp Ser Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
 85 90 95
 25 Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 30 Tyr Tyr Cys Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp
 115 120 125
 35 Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys
 130 135 140
 40 Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly
 145 150 155 160
 Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
 165 170 175
 45 Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr
 180 185 190
 50 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
 195 200 205
 55 Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn
 210 215 220
 60 Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro
 225 230 235 240
 Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
 245 250 255
 65 Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
 260 265 270

5 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
 275 280 285
 Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
 290 295 300
 10 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
 305 310 315 320
 15 Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
 325 330 335
 20 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
 340 345 350
 25 Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
 355 360 365
 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
 370 375 380
 30 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
 385 390 395 400
 35 Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
 405 410 415
 40 Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 420 425 430
 45 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 435 440 445
 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
 450 455 460
 50 Ser Leu Ser Pro Gly Lys
 465 470
 55 <210> 462
 <211> 236
 <212> PRT
 <213> Artificial Sequence
 60 <220>
 <223> recombinant TNF-alpha binder
 <400> 462
 65 Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

Phe Pro Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
 20 25 30

5

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

10

Gln Gly Ile Arg Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys
 50 55 60

15

Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val
 65 70 75 80

20

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 85 90 95

25

Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg
 100 105 110

30

Tyr Asn Arg Ala Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 115 120 125

35

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

40

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

45

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 165 170 175

50

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

55

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

60

<210> 463
 <211> 224
 <212> PRT
 <213> Artificial Sequence

65

<220>
 <223> recombinant TNF-alpha binder
 <400> 463

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gln Tyr
 20 25 30
 10 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 15 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 25 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
 100 105 110
 30 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125
 35 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 130 135 140
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160
 40 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175
 45 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190
 50 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 195 200 205
 55 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 210 215 220
 <210> 464
 <211> 214
 <212> PRT
 60 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 65 <400> 464
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

	1	5	10	15
5	Asp Arg Val Thr	Ile Thr Cys His Ala	Ser Arg Lys Ile	Arg Asn Tyr
	20	25	30	
10	Leu Ala Trp Tyr	Gln Gln Lys Pro Gly	Lys Ala Pro Lys	Leu Leu Ile
	35	40	45	
15	Tyr Ala Ala Ser	Ser Leu Leu Arg Gly	Val Pro Ser Arg	Phe Ser Gly
	50	55	60	
20	Ser Gly Ser Gly	Thr Asp Phe Thr	Leu Thr Ile Ser	Ser Leu Gln Pro
	65	70	75	80
25	Glu Asp Val Ala	Thr Tyr Tyr Cys	Gln Arg Tyr Asp	Lys Pro Pro Tyr
	85	90	95	
30	Thr Phe Gly Gln	Gly Thr Lys Val	Glu Ile Lys Arg	Thr Val Ala Ala
	100	105	110	
35	Pro Ser Val Phe	Ile Phe Pro Pro	Ser Asp Glu Gln	Leu Lys Ser Gly
	115	120	125	
40	Thr Ala Ser Val	Val Cys Leu Leu	Asn Asn Phe Tyr	Pro Arg Glu Ala
	130	135	140	
45	Lys Val Gln Trp	Lys Val Asp Asn	Ala Leu Gln Ser	Gly Asn Ser Gln
	145	150	155	160
50	Glu Ser Val Thr	Glu Gln Asp Ser	Lys Asp Ser Thr	Tyr Ser Leu Ser
	165	170	175	
55	Ser Thr Leu Thr	Leu Ser Lys Ala	Asp Tyr Glu Lys	His Lys Val Tyr
	180	185	190	
60	Ala Cys Glu Val	Thr His Gln Gly	Leu Ser Ser Pro	Val Thr Lys Ser
	195	200	205	
65	Phe Asn Arg Gly	Glu Cys		
	210			
70	<210>	465		
	<211>	672		
	<212>	DNA		
	<213>	Artificial Sequence		
75	<220>			
	<223>	recombinant TNF-alpha binder		
80	<400>	465		
	gaagttcagc tggttgaaag	cggcgggtggt ctggttcagc	cggttcgtag cctgcgtctg	60
	agctgtgcgg cgagcggcctt	tacctttgat cagtttgca	tgcattgggt gcgtcaggcc	120

	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
5	gcggtatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc	300
	tatctgagca ccgcgagcag cctggattat tggggccagg gtacctggt taccgttagc	360
10	agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc	420
	ggtggcaccg cagcgtggg ttgcctggtg aaagattatt tcccggaacc ggtgaccgtg	480
15	agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc	540
	agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag	600
	acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa	660
20	ccgaaaagct gc	672
	<210> 466	
25	<211> 643	
	<212> DNA	
	<213> Artificial Sequence	
	<220>	
30	<223> recombinant TNF-alpha binder	
	<400> 466	
	gatattcaga tgaccagag cccgagcagc ctgagcgcg gctggtggcga tcgtgtgacc	60
35	attacctgcc gtgcgagcca gggcattcgt aactatctgg cctggtatca gcagaaaccg	120
	ggcaaagcgc cgaaactgct gatttatgcg gcgagctggc tgcagagcgg tgtgccgagc	180
	cgttttagcg gcagcggtag cggcaccgat tttacctga ccattagcag cctgcagccg	240
40	gaagatgtgg cgacctatta ttgccagcgt tatatccagc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gctgttcat ttttccgccg	360
45	agcgatgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat	420
	ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
	gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540
50	ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgc ccatcagggc	600
	ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gct	643
55	<210> 467	
	<211> 360	
	<212> DNA	
	<213> Artificial Sequence	
60	<220>	
	<223> recombinant TNF-alpha binder	
	<400> 467	
65	gaagttcagc tggttgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
	agctgtgcgg cgagcggcctt tacctttgat cagtttgcga tgcattgggt gcgtcaggcc	120

	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
	gcg gatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
5	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcbc gaaagtgagc	300
	tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc	360
10	<210> 468 <211> 321 <212> DNA <213> Artificial Sequence	
15	<220> <223> recombinant TNF-alpha binder	
	<400> 468	
20	gatattcaga tgaccagag cccgagcagc ctgagcgcca gcgtgggcca tcgtgtgacc	60
	attacctgcc gtgcgagcca gggcattcgt aactatctgg cctggatatca gcagaaaccg	120
	ggcaaagcbc cgaaactgct gatttatgcb gcbagctggc tgcagagcgg tgtgccgagc	180
25	cgttttagcb gcagcggtag cggcacccgat tttaccctga ccattagcag cctgcagccg	240
	gaagatgtgg cgacctatta ttgccagcgt tatatccagc cgccgtatac ctttggtcag	300
30	ggtaccaaag ttgaaattaa a	321
	<210> 469 <211> 672 <212> DNA <213> Artificial Sequence	
35	<220> <223> recombinant TNF-alpha binder	
40	<400> 469	
	gaagttcagc tgggtgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
	agctgtgcgg cgagcggcct tacctttggc cagtttgcca tgcattgggt gcgtcaggcc	120
45	ccgggcaaag gcctggaatg ggtgagcgcb attacctgga acagcggcca tattgattat	180
	gcg gatagcb tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
50	ctgcagatga acagcctgcb tgcggaagat accgcggtgt attattgcbc gaaagtgagc	300
	tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc	360
	agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc	420
55	ggtggcaccg cagcgtggg ttgcctggtg aaagattatt tcccggaaac ggtgaccgtg	480
	agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc	540
60	agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag	600
	acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa	660
	ccgaaaagct gc	672
65	<210> 470 <211> 642	

<212> DNA
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder

<400> 470
 gatattcaga tgacccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc 60
 10 attacctgcc gcgcgagcca gcgcctacgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gattggcgcg gcgagcagca ccattagcgg tgtgccgagc 180
 15 cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg 240
 gaagatgtgg cgacctatta ttgccaacgt tatattcagc cgccgtatac ctttggtcag 300
 ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat tttccgccg 360
 20 agcgatgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat 420
 ccgcgtgaag cgaaagtga gtggaaagtg gataacgcgc tgcagagcgg caacagccag 480
 25 gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc 540
 ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtga ccatcagggc 600
 ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc 642

30 <210> 471
 <211> 360
 <212> DNA
 <213> Artificial Sequence

35 <220>
 <223> recombinant TNF-alpha binder

<400> 471
 40 gaagttcagc tggttgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggcctt tacctttggc cagtttgcca tgcattgggt gcgtcaggcc 120
 45 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc 300
 50 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360

55 <210> 472
 <211> 321
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

60 <400> 472
 gatattcaga tgacccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc 60
 65 attacctgcc gcgcgagcca gcgcctacgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gattggcgcg gcgagcagca ccattagcgg tgtgccgagc 180

	cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg	240
	gaagatgtgg cgacctatta ttgccaacgt tatattcagc cgccgtatac ctttggtcag	300
5	ggtaccaaag ttgaaattaa a	321
10	<210> 473 <211> 672 <212> DNA <213> Artificial Sequence	
15	<220> <223> recombinant TNF-alpha binder	
	<400> 473 gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
20	agctgtgcgg cgagcggcct tacctttggc gattatgcga tgcattgggt gcgtcaggcc	120
	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
	gcggatagcg tggaaggcgg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
25	ctgcagatga acagcctgcg tgcggaagat acccgggtgt attattgcgc gaaagtgaaa	300
	tatctgagca ccgcgagcca gctggattat tggggccagg gtacctggt taccgttagc	360
30	agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc	420
	ggtggcaccg cagcgtggg ttgcctggtg aaagattatt tcccgggaacc ggtgaccgtg	480
	agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggg gctgcagagc	540
35	agtggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag	600
	acctatatat gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa	660
40	ccgaaaagct gc	672
45	<210> 474 <211> 642 <212> DNA <213> Artificial Sequence	
50	<220> <223> recombinant TNF-alpha binder	
	<400> 474 gatattcaga tgacctcagag cccgagcagc ctgagcgcca gcgtgggcca tcgtgtgacc	60
	attacctgcc gtaccagcat gcgcgtgcgt aactatctgg cctggtatca gcagaaaccg	120
55	ggcaaagcgc cgaaactgct gatattatgcg gcgagctggc tgcagagcgg tgtgccgagc	180
	cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg	240
60	gaagatgtgg cgacctatta ttgccagcgt tatgatcgtc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat ttttccgccg	360
	agcgatgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat	420
65	ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
	gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540

ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgc ccatcagggc 600
 ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc 642
 5
 <210> 475
 <211> 360
 <212> DNA
 10 <213> Artificial Sequence
 <220>
 <223> recombinant TNF-alpha binder
 15 <400> 475 60
 gaagttcagc tgggtgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg
 agctgtgcgg cgagcggctt tacctttggc gattatgcga tgcattgggt gcgtcaggcc 120
 20 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcgggtgt attattgcgc gaaagtgaaa 300
 25 tatctgagca ccgcgagcca gctggattat tggggccagg gtaccctggt taccgttagc 360
 <210> 476
 30 <211> 321
 <212> DNA
 <213> Artificial Sequence
 <220>
 35 <223> recombinant TNF-alpha binder
 <400> 476 60
 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcca tcgtgtgacc
 40 attacctgcc gtaccagcat gcgcgtgcgt aactatctgg cctggtatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttatgcg gcgagctggc tgagagcgg tgtgccgagc 180
 cgtttttagcg gcagcggtag cggcaccgat tttacctga ccattagcag cctgcagccg 240
 45 gaagatgtgg cgacctatta ttgccagcgt tatgatcgtc cgccgtatac ctttggtcag 300
 ggtaccaaag ttgaaattaa a 321
 50
 <210> 477
 <211> 672
 <212> DNA
 <213> Artificial Sequence
 55 <220>
 <223> recombinant TNF-alpha binder
 <400> 477 60
 60 gaagttcagc tgggtgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg 120
 agctgtgcgg cgagcggctt tacctttgat gattatgcga tgcattgggt gcgtcaggcc 180
 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 240
 65 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240

	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgaaa	300
	tatctgagca ccgcgagcca gctggattat tggggccagg gtaccctggt taccgttagc	360
5	agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc	420
	ggtggcaccg cagcgtggg ttgcctggtg aaagattatt tcccgaacc ggtgaccgtg	480
10	agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggg gctgcagagc	540
	agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag	600
	acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa	660
15	ccgaaaagct gc	672
20	<210> 478	
	<211> 642	
	<212> DNA	
	<213> Artificial Sequence	
	<220>	
25	<223> recombinant TNF-alpha binder	
	<400> 478	
	gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc	60
30	attacctgcc gtaccagcat gcgcgtgcgt aactatctgg cctggtatca gcagaaaccg	120
	ggcaaagcgc cgaaactgct gatttatgcg gcgagctggc tgcagaaagg tgtgccgagc	180
	cgttttagcg gcagcggtag cggcaccgat tttacctga ccattagcag cctgcagccg	240
35	gaagatgtgg cgacctatta ttgccagcgt tatgatcgtc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat tttccgccg	360
40	agcgtgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat	420
	ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
	gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540
45	ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgac ccatcagggc	600
	ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc	642
50	<210> 479	
	<211> 360	
	<212> DNA	
	<213> Artificial Sequence	
	<220>	
55	<223> recombinant TNF-alpha binder	
	<400> 479	
60	gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
	agctgtgcgg cgagcggcctt tacctttgat gattatgcga tgcattgggt gcgtcaggcc	120
	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
65	gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgaaa	300

tatctgagca ccgcgagcca gctggattat tggggccagg gtaccctggt taccgttagc 360

5 <210> 480
 <211> 321
 <212> DNA
 <213> Artificial Sequence

10 <220>
 <223> recombinant TNF-alpha binder

<400> 480 60
 gatattcaga tgacccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc

15 120
 attacctgcc gtaccagcat gcgcgtgcgt aactatctgg cctggatatca gcagaaaccg

180
 ggcaaagcgc cgaaactgct gatttatgcg gcgagctggc tgcagaaagg tgtgccgagc

20 240
 cgttttagcg gcagcggtag cggcaccgat ttaccctga ccattagcag cctgcagccg

300
 gaagatgtgg cgacctatta ttgccagcgt tatgatcgtc cgccgtatac ctttggtcag

321
 ggtaccaaag ttgaaattaa a

25

<210> 481
 <211> 672
 <212> DNA
 <213> Artificial Sequence

30 <220>
 <223> recombinant TNF-alpha binder

35 <400> 481 60
 gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg

120
 agctgtgcgg cgagcggctt tacctttgat cagtttgca tgcattgggt gcgtcaggcc

180
 ccggggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat

240
 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat

300
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgaaa

45 360
 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc

420
 agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc

480
 ggtggcaccg cagcgcctggg ttgcctggtg aaagattatt tcccggaaac ggtgaccgtg

50 540
 agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc

600
 agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccagc

55 660
 acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa

672
 ccgaaaagct gc

60

<210> 482
 <211> 642
 <212> DNA
 <213> Artificial Sequence

65 <220>
 <223> recombinant TNF-alpha binder

```

<400> 482
gatattcaga tgaccagag cccgagcagc ctgagcgca gcggtggcg tctgtgtgacc      60
5  attacctgca ccgcgagcca gcgcctgcgt aactatctgg cctgggtatca gcagaaaccg      120
   ggcaaagcgc cgaaactgct gatttatgcg gcgagcagca cccagcgcg tgtgccgagc      180
10  cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg      240
   gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag      300
   ggtacaaaaa ttgaaattaa acgtaccgtg gcagcgccga gcggtgtcat tttccgccc      360
15  agcgtatgaac agctgaaaag cggcaccgag agcgtgggtg gcctgctgaa caacttttat      420
   ccgcgtgaag cgaaagtga gtggaaagtg gataacgcgc tgcagagcgg caacagccag      480
   gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc      540
20  ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtga ccatcagggc      600
   ctgagcagcc cggttacaa atcttttaac cgtggcgaat gc                                642
25
   <210> 483
   <211> 360
   <212> DNA
   <213> Artificial Sequence
30
   <220>
   <223> recombinant TNF-alpha binder

   <400> 483
35  gaagttcagc tggttgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg      60
   agctgtgcgg cgagcggcctt tacctttgat cagtttgca tgcattgggt gcgtcaggcc      120
   ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggccca tattgattat      180
40  gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat      240
   ctgcagatga acagcctgcg tgcggaagat accgcgggtg attattgcgc gaaagtgaaa      300
45  tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc      360

   <210> 484
   <211> 321
   <212> DNA
   <213> Artificial Sequence
50
   <220>
   <223> recombinant TNF-alpha binder
55
   <400> 484
   gatattcaga tgaccagag cccgagcagc ctgagcgca gcggtggcg tctgtgtgacc      60
   attacctgca ccgcgagcca gcgcctgcgt aactatctgg cctgggtatca gcagaaaccg      120
60  ggcaaagcgc cgaaactgct gatttatgcg gcgagcagca cccagcgcg tgtgccgagc      180
   cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg      240
65  gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag      300
   ggtacaaaaa ttgaaattaa a                                321

```


5 <210> 485
 <211> 672
 <212> DNA
 <213> Artificial Sequence

10 <220>
 <223> recombinant TNF-alpha binder

15 <400> 485
 gaagttcagc tggttgaaag cggcgggtgt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggctt tacctttgat cagtttgca tgcattgggt gcgtcaggcc 120
 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 20 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc 300
 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360
 agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc 420
 25 ggtggcaccg cagcgtggg ttgcctggtg aaagattatt tcccggaaac ggtgaccgtg 480
 agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc 540
 30 agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccagc 600
 acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa 660
 ccgaaaagct gc 672

35 <210> 486
 <211> 642
 <212> DNA
 40 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

45 <400> 486
 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc 60
 attacctgcc gcgcgagcca gcgcctacgt aactatctgg cctggtatca gcagaaaccg 120
 50 ggcaaagcgc cgaaactgct gatattatgcg gcgagcagca ccattagcgg tgtgccgagc 180
 cgttttagcg gcagcggtag cggcaccgat ttaccctga ccattagcag cctgcagccg 240
 gaagatgtgg cgacctatta ttgccaacgt tatattcagc cgccgtatac ctttggtcag 300
 55 ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat ttttccgccc 360
 agcgatgaac agctgaaaaa cggcaccgcg agcgtggtgt gcctgctgaa caacttttat 420
 60 ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcaagcgg caacagccag 480
 gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc 540
 ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgac ccatcagggc 600
 65 ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc 642

<210> 487
 <211> 360
 <212> DNA
 5 <213> Artificial Sequence

 <220>
 <223> recombinant TNF-alpha binder

 10 <400> 487
 gaagttcagc tggttgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggctt tacctttgat cagtttgca tgcattgggt gcgtcaggcc 120
 15 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc 300
 20 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360

 <210> 488
 25 <211> 321
 <212> DNA
 <213> Artificial Sequence

 <220>
 30 <223> recombinant TNF-alpha binder

 <400> 488
 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc 60
 35 attacctgcc gcgcgagcca gcgcctacgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttatgcg gcgagcagca ccattagcgg tgtgccgagc 180
 cgtttttagcg gcagcggtag cggcacccgat tttaccctga ccattagcag cctgcagccg 240
 40 gaagatgtgg cgacctatta ttgccaacgt tatattcagc cgccgtatac ctttggtcag 300
 ggtaccaaaag ttgaaattaa a 321

 45 <210> 489
 <211> 672
 <212> DNA
 <213> Artificial Sequence

 50 <220>
 <223> recombinant TNF-alpha binder

 <400> 489
 55 gaagttcagc tggttgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggctt tacctttggc cagtttgca tgcattgggt gcgtcaggcc 120
 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 60 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc 300
 65 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360
 agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc 420

	ggatggcaccg cagcgctggg ttgcctggtg aaagattatt tcccgggaacc ggtgaccgtg	480
5	agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc	540
	agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag	600
	acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa	660
10	ccgaaaagct gc	672
15	<210> 490 <211> 642 <212> DNA <213> Artificial Sequence	
20	<220> <223> recombinant TNF-alpha binder	
	<400> 490 gatattcaga tgacccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc	60
25	attacctgcc gcgcgagcca gcgcctacgt aactatctgg cctgggtatca gcagaaaccg	120
	ggcaaagcgc cgaaactgct gattggcgcg gcgagcagca ccattagcgg tgtgccgagc	180
	cgttttagcg gcagcggtag cggcaccgat tttacctga ccattagcag cctgcagccg	240
30	gaagatgtgg cgacctatta ttgccaacgt tatattcagc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat tttccgccg	360
35	agcgtgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat	420
	ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
	gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540
40	ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgac ccatcagggc	600
	ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc	642
45	<210> 491 <211> 360 <212> DNA <213> Artificial Sequence	
50	<220> <223> recombinant TNF-alpha binder	
	<400> 491 gaagttcagc tggttgaaag cggcgggtgt ctggttcagc cgggtcgtag cctgcgtctg	60
55	agctgtgcgg cgagcggctt tacctttggc cagtttgca tgcattgggt gcgtcaggcc	120
	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
60	gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc	300
65	tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc	360
	<210> 492	

<211> 321
 <212> DNA
 <213> Artificial Sequence

5 <220>
 <223> recombinant TNF-alpha binder

<400> 492
 gatattcaga tgaccagag cccgagcagc ctgagcgca gcgtgggcga tcgtgtgacc 60
 10 attacctgcc gcgcgagcca gcgcctacgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaactgct gattggcgcg gcgagcagca ccattagcgg tgtgccgagc 180
 15 cgtttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg 240
 gaagatgtgg cgacctatta ttgccaacgt tatattcagc cgccgtatac ctttggtcag 300
 ggtaccaaag ttgaaattaa a 321

20

<210> 493
 <211> 672
 <212> DNA
 25 <213> Artificial Sequence

<220>
 <223> recombinant TNF-alpha binder

30 <400> 493
 gaagttcagc tggttgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggcct tacctttggc cagtttgca tgcattgggt gcgtcaggcc 120
 35 ccggggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat acccggtgtg attattgcgc gaaagtgaaa 300
 40 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360
 agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc 420
 45 ggtggcaccg cagcgtggg ttgcctggtg aaagattatt tcccggaaacc ggtgaccgtg 480
 agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggg gctgcagagc 540
 agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag 600
 50 acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtgataa aaaagtggaa 660
 ccgaaaagct gc 672

55

<210> 494
 <211> 642
 <212> DNA
 <213> Artificial Sequence

60

<220>
 <223> recombinant TNF-alpha binder

<400> 494
 65 gatattcaga tgaccagag cccgagcagc ctgagcgca gcgtgggcga tcgtgtgacc 60
 attacctgca ccgcgagcca gcgcctgcgt aactatctgg cctggatatca gcagaaaccg 120

	ggcaaagcgc cgaaactgct gattggcgcg gcgagcagca cccagcgcgg tgtgccgagc	180
5	cgtttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg	240
	gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag	300
	ggtacaaaaa ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat ttttcgccg	360
10	agcgatgaac agctgaaaag cggcaccgag agcgtggtgt gcctgctgaa caacttttat	420
	ccgcgtgaag cgaaagtgcg gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
15	gaaagcgtaa ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540
	ctgagcaaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgcg ccatcagggc	600
	ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc	642
20	<210> 495 <211> 360 <212> DNA <213> Artificial Sequence	
25	<220> <223> recombinant TNF-alpha binder	
30	<400> 495 gaagttcagc tggttgaaag cggcggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
	agctgtgcgg cgagcggctt tacctttggc cagtttgca tgcattgggt gcgtcaggcc	120
35	ccgggcaaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
	gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgaag	300
40	tatctgagca ccgcgagcag cctggattat tggggccagg gtacctggt taccgttagc	360
45	<210> 496 <211> 321 <212> DNA <213> Artificial Sequence	
50	<220> <223> recombinant TNF-alpha binder	
55	<400> 496 gatattcaga tgacctagag cccgagcagc ctgagcgcca gcgtgggcca tcgtgtgacc	60
	attacctgca ccgcgagcca gcgcctgcgt aactatctgg cctgggtatca gcagaaaccg	120
	ggcaaagcgc cgaaactgct gattggcgcg gcgagcagca cccagcgcgg tgtgccgagc	180
	cgtttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg	240
60	gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag	300
	ggtacaaaaa ttgaaattaa a	321
65	<210> 497 <211> 672 <212> DNA	

```

<213> Artificial Sequence

<220>
<223> recombinant TNF-alpha binder
5
<400> 497
gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg      60
agctgtgcgg cgagcgggctt tacctttggc cagtttgca tgcattgggt gcgtcaggcc      120
10 cccggcгааг gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat      180
gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat      240
15 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgaaa      300
tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc      360
agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc      420
20 ggtggcaccg cagcgcctggg ttgcctgggtg aaagattatt tcccggaacc ggtgaccgtg      480
agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc      540
25 agcggcctgt atagcctgag ttctgtgggtg accgttcgga gcagcagcct gggcaccag      600
acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa      660
30 ccgaaaagct gc      672

<210> 498
<211> 642
<212> DNA
35 <213> Artificial Sequence

<220>
<223> recombinant TNF-alpha binder
40 <400> 498
gatattcaga tgaccagag cccgagcagc ctgagcgcgа gcgtgggсga tcgtgtgacc      60
attacctgca ccgcgagcca gcgcctgcgt aactatctgg cctggtatca gcagaaaccg      120
45 ggcaaagcgc cgaaactgct gatttggggc gcgagcagca cccagcgсgg tgtgccgagc      180
cgtttttagcg gcagcggtag cggcacccgat tttaccctga ccattagcag cctgcagccg      240
50 gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag      300
ggtaccaaaa ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat ttttcgсcg      360
agcgatgaac agctgaaaag cggcaccccg agcgtggtgt gcctgctgaa caacttttat      420
55 ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcagagcgg caacagccag      480
gaaagcgтта ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc      540
ctgagcгааг cggattacga aaaacacaaa gtgtatgcgt gcgaagtгac ccatcagggc      600
60 ctgagcagcc cggttaccaa atcttttaac cgtggcgaaт gc      642

<210> 499
65 <211> 360
<212> DNA
<213> Artificial Sequence

```

<220>
 <223> recombinant TNF-alpha binder

5 <400> 499
 gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggcctt tacctttggc cagtttgca tgcattgggt gcgtcaggcc 120
 10 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgaaa 300
 15 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360

20 <210> 500
 <211> 321
 <212> DNA
 <213> Artificial Sequence

25 <220>
 <223> recombinant TNF-alpha binder

<400> 500
 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc 60
 30 attacctgca ccgcgagcca gcgcctgcgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttgggcg gcgagcagca cccagcgcgg tgtgccgagc 180
 cgtttttagcg gcagcggtag cggcacccgat tttaccctga ccattagcag cctgcagccg 240
 35 gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag 300
 ggtacaaaaa ttgaaattaa a 321

40 <210> 501
 <211> 672
 <212> DNA
 <213> Artificial Sequence

45 <220>
 <223> recombinant TNF-alpha binder

<400> 501
 50 gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggcctt tacctttgat catttcgca tgcattgggt gcgtcaggcc 120
 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tgtggattat 180
 55 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc 300
 60 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360
 agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc 420
 ggtggcaccg cagcgcctggg ttgcctggtg aaagattatt tcccgggaacc ggtgaccgtg 480
 65 agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc 540

	agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag	600
	acctatatatt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa	660
5	ccgaaaagct gc	672
10	<210> 502 <211> 642 <212> DNA <213> Artificial Sequence	
15	<220> <223> recombinant TNF-alpha binder	
	<400> 502 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc	60
20	attacctgcc gtaccagcat gagcattcgt aactatctgg cctgggtatca gcagaaaccg	120
	ggcaaagcgc cgaaactgct gatttatgcg gcgagcaccg tgaaaaaagg tgtgccgagc	180
	cgttttagcg gcagcggtag cggcaccgat ttaccctga ccattagcag cctgcagccg	240
25	gaagatgtgg cgacctatta ttgccagcgt tatgatcgtc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat tttccgccg	360
30	agcgtgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat	420
	ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
	gaaagcgta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540
35	ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgac ccatcagggc	600
	ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc	642
40	<210> 503 <211> 360 <212> DNA <213> Artificial Sequence	
45	<220> <223> recombinant TNF-alpha binder	
	<400> 503 gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
50	agctgtgcgg cgagcggctt tacctttgat catttcgcga tgcattgggt gcgtcaggcc	120
	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tgtggattat	180
55	gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc	300
60	tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc	360
65	<210> 504 <211> 321 <212> DNA <213> Artificial Sequence	
	<220>	

<223> recombinant TNF-alpha binder

<400> 504

5 gatattcaga tgaccagag cccgagcagc ctgagcgca gcgtgggca tcgtgtgacc 60
 attacctgcc gtaccagcat gagcattcgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttatgcg gcgagcacc tgaaaaaagg tgtgccgagc 180
 10 cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg 240
 gaagatgtgg cgacctatta ttgccagcgt tatgatcgtc cgccgtatac ctttggtcag 300
 15 ggtaccaaag ttgaaattaa a 321

<210> 505

<211> 672

<212> DNA

20 <213> Artificial Sequence

<220>

<223> recombinant TNF-alpha binder

25 <400> 505
 gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggcctt tacctttgat cagtttgca tgcattgggt gcgtcaggcc 120
 30 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 gcggatagcg tggaaggccg tttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 35 ctgcagatga acagcctgcg tgcggaagat acccgggtgt attattgcg gaaagtga 300
 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360
 agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc 420
 40 ggtggcaccg cagcgtggtg ttgcctggtg aaagattatt tcccggaacc ggtgaccgtg 480
 agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcggt gctgcagagc 540
 agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag 600
 45 acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa 660
 ccgaaaagct gc 672

50

<210> 506

<211> 642

<212> DNA

<213> Artificial Sequence

55

<220>

<223> recombinant TNF-alpha binder

60 <400> 506
 gatattcaga tgaccagag cccgagcagc ctgagcgca gcgtgggca tcgtgtgacc 60
 attacctgcc gcgcgagcca gggcctgcgt aactatctgg cctggatatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttatgcg gcgagcagca ccattcgcg tgtgccgagc 180
 65 cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg 240

	gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat ttttcgccg	360
5	agcgatgaac agctgaaaag cggcacccgcg agcgtggtgt gcctgctgaa caacttttat	420
	ccgcgtgaag cgaaagtgcg gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
10	gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540
	ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgcg ccatcagggc	600
	ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc	642
15	<210> 507 <211> 360 <212> DNA <213> Artificial Sequence	
20	<220> <223> recombinant TNF-alpha binder	
25	<400> 507 gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
	agctgtgcgg cgagcggcctt tacctttgat cagtttgca tgcattgggt gcgtcaggcc	120
30	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
	gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgaaa	300
35	tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc	360
40	<210> 508 <211> 321 <212> DNA <213> Artificial Sequence	
45	<220> <223> recombinant TNF-alpha binder	
50	<400> 508 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcca tcgtgtgacc	60
	attacctgcc gcgcgagcca gggcctgcgt aactatctgg cctggtatca gcagaaaccg	120
	ggcaaagcgc cgaaactgct gatttatgcg gcgagcagca ccattcgcg tgtgccgagc	180
	cgtttttagcg gcagcggtag cggcacccgat tttaccctga ccattagcag cctgcagccg	240
55	gaagatgtgg cgacctatta ttgccagcgt tatattcagc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa a	321
60	<210> 509 <211> 672 <212> DNA <213> Artificial Sequence	
65	<220> <223> recombinant TNF-alpha binder	

	<400> 509	
	gaagttcagc tggttgaaag cggcgggtggt ctggttcagc cgggtcgtag cctgcgtctg	60
5	agctgtgcgg cgagcggcctt tacctttgat cagtttgca tgcattgggt gcgtcaggcc	120
	ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat	180
	gcggatagcg tggaaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat	240
10	ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc	300
	tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc	360
15	agcgcgagca ccaaaggccc gagcgtgttt ccgctggccc cgagcagcaa aagcaccagc	420
	ggtggcaccg cagcgtctggg ttgcctggtg aaagattatt tcccgaacc ggtgaccgtg	480
	agctggaata gcggtgcgct gaccagcggc gtgcatacct ttccggcgggt gctgcagagc	540
20	agcggcctgt atagcctgag ttctgtggtg accgttccga gcagcagcct gggcaccag	600
	acctatattt gcaacgtgaa ccacaaaccg agcaacacca aagtggataa aaaagtggaa	660
25	ccgaaaagct gc	672
	<210> 510	
	<211> 642	
	<212> DNA	
30	<213> Artificial Sequence	
	<220>	
	<223> recombinant TNF-alpha binder	
35	<400> 510	
	gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgtgtgacc	60
	attacctgcc gcgcgagcca gcgcctacgt aactatctgg cctggtatca gcagaaaccg	120
40	ggcaaagcgc cgaaaactgct gatattatgcg gcgagcagca ccattagcgg tgtgccgagc	180
	cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg	240
45	gaagatgtgg cgacctatta ttgccaacgt tatattcagc cgccgtatac ctttggtcag	300
	ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat ttttcgccg	360
	agcgtatgaac agctgaaaag cggcaccgcg agcgtggtgt gcctgctgaa caacttttat	420
50	ccgcgtgaag cgaaagtgca gtggaaagtg gataacgcgc tgcagagcgg caacagccag	480
	gaaagcgtta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc	540
55	ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtgac ccatcagggc	600
	ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gc	642
	<210> 511	
60	<211> 360	
	<212> DNA	
	<213> Artificial Sequence	
	<220>	
65	<223> recombinant TNF-alpha binder	
	<400> 511	

	gaagttcagc	tggttgaaag	cggcgggtggt	ctggttcagc	cgggtcgtag	cctgcgtctg	60
	agctgtgcgg	cgagcggctt	tacctttgat	cagtttgca	tgcatgggt	gcgtcaggcc	120
5	ccgggcaaag	gcctggaatg	ggtgagcgcg	attacctgga	acagcggcca	tattgattat	180
	gcggatagcg	tggaaggccg	ttttaccatt	agccgtgata	acgcgaaaaa	cagcctgtat	240
10	ctgcagatga	acagcctgcg	tgcggaagat	accgcggtgt	attattgcgc	gaaagtgagc	300
	tatctgagca	ccgcgagcag	cctggattat	tggggccagg	gtaccctggt	taccgttagc	360
15	<210>	512					
	<211>	321					
	<212>	DNA					
	<213>	Artificial Sequence					
20	<220>						
	<223>	recombinant TNF-alpha binder					
	<400>	512					
	gatattcaga	tgaccagag	cccagcagc	ctgagcgca	gcgtgggca	tcgtgtgacc	60
25	attacctgcc	gcgcgagcca	gcgcctacgt	aactatctgg	cctggatatca	gcagaaaccg	120
	ggcaaagcgc	cgaaactgct	gatttatgcg	gcgagcagca	ccattagcgg	tgtgccgagc	180
30	cgttttagcg	gcagcggtag	cggcaccgat	tttaccctga	ccattagcag	cctgcagccg	240
	gaagatgtgg	cgacctatta	ttgccaacgt	tatattcagc	cgccgtatac	ctttggtcag	300
	ggtaccaaag	ttgaaattaa	a				321
35	<210>	513					
	<211>	672					
	<212>	DNA					
	<213>	Artificial Sequence					
40	<220>						
	<223>	recombinant TNF-alpha binder					
	<400>	513					
45	gaagttcagc	tggttgaaag	cggcgggtggt	ctggttcagc	cgggtcgtag	cctgcgtctg	60
	agctgtgcgg	cgagcggctt	tacctttgat	cagtttgca	tgcatgggt	gcgtcaggcc	120
50	ccgggcaaag	gcctggaatg	ggtgagcgcg	attacctgga	acagcggcca	tattgattat	180
	gcggatagcg	tggaaggccg	ttttaccatt	agccgtgata	acgcgaaaaa	cagcctgtat	240
	ctgcagatga	acagcctgcg	tgcggaagat	accgcggtgt	attattgcgc	gaaagtgagc	300
55	tatctgagca	ccgcgagcag	cctggattat	tggggccagg	gtaccctggt	taccgttagc	360
	agcgcgagca	ccaaaggccc	gagcgtgttt	ccgctggccc	cgagcagcaa	aagcaccagc	420
60	ggtggcaccg	cagcgcctggg	ttgcctgggtg	aaagattatt	tcccgggaacc	ggtgaccgtg	480
	agctggaata	gcggtgcgct	gaccagcggc	gtgcatacct	ttccggcggt	gctgcagagc	540
	agcggcctgt	atagcctgag	ttctgtgggtg	accgttccga	gcagcagcct	gggcacccag	600
65	acctatat	tttgcacgtgaa	ccacaaaccg	agcaacacca	aagtggataa	aaaagtggaa	660
	ccgaaaagct	gc					672

5 <210> 514
 <211> 643
 <212> DNA
 <213> Artificial Sequence

10 <220>
 <223> recombinant TNF-alpha binder

15 <400> 514
 gatattcaga tgaccagag cccgagcagc ctgagcgca gcgtgggcga tcgtgtgacc 60
 attacctgcc gtgcgagcca gggcattcgt aactatctgg cctgggtatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttatgcg gcgagctggc tgcagagcgg tgtgccgagc 180
 cgttttagcg gcagcggtag cggcaccgat tttaccctga ccattagcag cctgcagccg 240
 20 gaagatgtgg cgacctatta ttgccagcgt tatatccagc cgccgtatac ctttggtcag 300
 ggtaccaaag ttgaaattaa acgtaccgtg gcagcgccga gcgtgttcat ttttcgccc 360
 agcgatgaac agctgaaaag cggcaccgcg agcgtgggtg gcctgctgaa caacttttat 420
 25 ccgctgaag cgaaagtga gtggaaagtg gataacgcgc tgcagagcgg caacagccag 480
 gaaagcgta ccgaacagga tagcaaagat agcacctaca gcctgagcag caccctgacc 540
 30 ctgagcaaag cggattacga aaaacacaaa gtgtatgcgt gcgaagtga ccatcagggc 600
 ctgagcagcc cggttaccaa atcttttaac cgtggcgaat gct 643

35 <210> 515
 <211> 360
 <212> DNA
 <213> Artificial Sequence

40 <220>
 <223> recombinant TNF-alpha binder

45 <400> 515
 gaagttcagc tggttgaaag cggcgggtgt ctggttcagc cgggtcgtag cctgcgtctg 60
 agctgtgcgg cgagcggcct tacctttgat cagtttgca tgcattgggt gcgtcaggcc 120
 ccgggcaaag gcctggaatg ggtgagcgcg attacctgga acagcggcca tattgattat 180
 50 gcggatagcg tggaaggccg ttttaccatt agccgtgata acgcgaaaaa cagcctgtat 240
 ctgcagatga acagcctgcg tgcggaagat accgcggtgt attattgcgc gaaagtgagc 300
 55 tatctgagca ccgcgagcag cctggattat tggggccagg gtaccctggt taccgttagc 360

60 <210> 516
 <211> 321
 <212> DNA
 <213> Artificial Sequence

65 <220>
 <223> recombinant TNF-alpha binder

<400> 516
 gatattcaga tgaccagag cccgagcagc ctgagcgca gcgtgggcga tcgtgtgacc 60

attacctgcc gtgcgagcca gggcattcgt aactatctgg cctgggatca gcagaaaccg 120
ggcaaagcgc cgaaactgct gatttatgcg gcgagctggc tgcagagcgg tgtgccgagc 180
5 cgtttttagcg gcagcggtag cggcaccgat tttaacctga ccattagcag cctgcagccg 240
gaagatgtgg cgacctatta ttgccagcgt tatatccagc cgccgtatac ctttggtcag 300
ggtaccaaag ttgaaattaa a 321
10